

No makeup exams!!!

The course grades are assigned as:

90 – 100%	=	A -
80 – 89%	=	B
70 – 79%	=	C
60 – 69%	=	D
Below 60%	=	F

Note: Scores and grades will not be “curved.” Therefore, any number of students in this course can earn a score of 100 (or 0) on quizzes or exams; and any number of students can earn a grade of “A” (or “F”). By using the preceding factor, a student should constantly be aware of his/her potential final grade in the course. Students are welcome to discuss with the professor regarding to his/her progress or any aspects of the course.

Computer laboratory

Computer laboratory assignments are designed to supplement and reinforce skills acquired in the particular course which lists this course as a co requisite. In this course, there is an in-class lab component attended by the faculty. Usually, about 30% of class time is dedicated to lab. Faculty will be around when the students are doing their lab assignments.

Term Paper

Term paper requires students to write a report on “Data Mining and the Social Web.” Data Mining is a powerful tool that is designed to gather large sets of data at incredible speed and analyze them. Most companies use this tool to better understand their customer’s habits as well as their interests. Advertisers love this tool because it allows unprecedented amount of access to information. Most people are unaware that their data is being mined, bundled, and sold by a company to third party advertisers in order to make targeted ads more effective. This is a problematic practice because users are unaware that in most social media sites such as Facebook, this tool is used (b)(6) “User Data on the Social Web: Authorship, Agency, and Appropriation”). Hidden deep into most terms of service is the right to sell and mine your information to third parties, because most people are unaware that this is the status quo of how social media and other sites make their money. It presents a potential privacy concern for users because they did not consciously consent to have their user information mined and sold. Data mining itself is a power tool in advertising, however does question is does the use and creation of Data mining algorithms have the potential to lead to privacy violations when it is used to create targeted advertisements?

Facebook is a social media site that boasts 500 million users worldwide making this company one of the largest social media sites in the world. Facebook has had a myriad of its own controversies concerning how it addresses its users’ privacy. One such instance is how its’ terms of service (terms of service is what the user agrees to in order to use the service) is written in confusing legal jargon as many other sites in order to protect the owner’s rights. The paper is expected to be between 8 and 10 pages in length, including front and back matter. Sections of the paper will be developed throughout the course.

Course Schedule

Week Topic

1. Introduction to Data Mining
 - What is data mining?
 - Related technologies - Machine Learning, DBMS, OLAP, Statistics
 - Data Mining Goals
 - Stages of the Data Mining Process
 - Data Mining Techniques
 - Knowledge Representation Methods
 - Applications
 - Example: weather data
2. Data Warehouse and OLAP
 - Data Warehouse and DBMS
 - Multidimensional data model
 - OLAP operations
 - Example: loan data set
3. Data preprocessing
 - Data cleaning
 - Data transformation
 - Data reduction
 - Discretization and generating concept hierarchies
 - Installing Weka 3 Data Mining System
 - Experiments with Weka - filters, discretization
4. Data mining knowledge representation
 - Task relevant data
 - Background knowledge
 - Interestingness measures
 - Representing input data and output knowledge
 - Visualization techniques
 - Experiments with Weka - visualization
5. Attribute-oriented analysis
 - Attribute generalization
 - Attribute relevance
 - Class comparison
 - Statistical measures
 - Experiments with Weka - using filters and statistics
6. Midterm Exam
7. Data mining algorithms: Association rules
 - Motivation and terminology
 - Example: mining weather data
 - Basic idea: item sets
 - Generating item sets and rules efficiently
 - Correlation analysis
 - Experiments with Weka - mining association rules
8. Data mining algorithms: Classification

- Basic learning/mining tasks
- Inferring rudimentary rules: 1R algorithm
- Decision trees
- Covering rules
- Experiments with Weka - decision trees, rules
- 9. Data mining algorithms: Prediction
 - The prediction task
 - Statistical (Bayesian) classification
 - Bayesian networks
 - Instance-based methods (nearest neighbor)
 - Linear models
 - Experiments with Weka - Prediction
- 10. Evaluating what's been learned
 - Basic issues
 - Training and testing
 - Estimating classifier accuracy (holdout, cross-validation, leave-one-out)
 - Combining multiple models (bagging, boosting, stacking)
 - Minimum Description Length Principle (MLD)
 - Experiments with Weka - training and testing
- 11. Mining real data
 - Preprocessing data from a real medical domain (310 patients with Hepatitis C).
 - Applying various data mining techniques to create a comprehensive and accurate model of the data.
- Clustering
 - Basic issues in clustering
 - First conceptual clustering system: Cluster/2
 - Partitioning methods: k-means, expectation maximization (EM)
 - Hierarchical methods: distance-based agglomerative and divisible clustering
 - Conceptual clustering: Cobweb
 - Experiments with Weka - k-means, EM, Cobweb
- 12. Final Exam

6. Classroom Policies:

You can get policies regarding to the University academic policies from the Student Handbook on the University web-site or in the University catalog.

7. Attendance, Absence, Lateness, Incomplete:

A course grade of “incomplete” will be given under very unusual circumstances, and only if the student has complete at least 75% of the assigned work by the last day of class and only when an incomplete contract is signed and approved.

8. Course Outcome:

At the end of this course students should be able to:

1. explain the basic concepts, methodology and techniques of data mining;
2. develop skills of using recent data mining software for solving practical problems;
3. build multiple regression, discriminant analysis, and logistic models for forecasting;
4. understand the major data mining problems specific to different genres of data.
5. develop methods to monitor the ongoing performance of implemented models.

9. Moodle Forum:

We will use the Moodle Forum to extend the class discussion. I will actively participate in all ongoing discussion threads. This is a good place to engage your classmates in discussions of course topics. To encourage all to participate, contributions to the bulletin boards will be counted towards your class participation points. Other aspects of "class participation" will be discussed on the first day of class.

10. Academic Honesty:

It is assumed that all students have familiarized themselves with the university's policy on and definition of academic dishonesty. All work should be the student's own - academic honesty is expected of everyone. Those who do not adhere to university and professional expectations with respect to this will be dealt with in accordance with college policy. In general – students will receive a “0” on their work if they either submit work that isn’t their own (including cutting and pasting content from the Internet without proper citation) or allow other students to use their work. A second instance results in failure of the course.

11. Special Needs and Accommodations:

Please address any special problems or needs at the beginning of the quadmester with the instructor. If you are seeking accommodations based on a disability, you should provide a disability data sheet, which can be obtained from the student services office.

12. The Learning Environment:

RNU is committed to providing a positive learning environment in which students of all ages and backgrounds can learn together in a setting that encourages the free exchange of ideas and information. To accomplish this goal, the members of the RNU Board have established the following expectations for learning.

- All backgrounds and cultures are respected.
- During class discussions, everyone feels welcome to participate and a free exchange of ideas takes place.

- All members of the class arrive on time and leave the class only on breaks or in case of emergency.
- Distractions are kept to a minimum. Cell phones and other electronic devices are turned off in class, labs, and library. Students remain seated throughout class and refrain from talking with classmates while another class member or the instructor has the floor.
- Each student turns in work that is his or her own.
- Consideration is always given to other classes that are taking place in adjoining classrooms.
- At the end of a class, the members of the class and the instructor leave the classroom in good condition so that the next class can begin without disruption.

Reagan National University Library Services:

RNU's online collection contains over 60,000 volumes comprised of books, journals, videos, and faculty created resources. The Library Research Portal (library@rnu.edu) provides access to multiple services and authoritative resources for academic research including books, articles, texts, visual media, and teaching resources. Appropriate sources include scholarly and peer-reviewed journal articles, scholarly books, and well-respected news magazines and newspapers. The Library offers a large number of appropriate sources and each student is required to attend an online Library orientation. Assistance is available to help students select and locate appropriate sources when RNU is open. The online library is available to students 24 hours 7 days a week. All students can connect to the online library through the computers and laptops available at home and on campus. Each student must use their own pass code to access the library.

As an RNU student, you are required to use the RNU online library, as one source, to assist you in completing a required research paper or project.



Reagan National University

Syllabus

1. Administrative Information:

Course Number: IFS 381

Course Title: Business Process Management

Credit Hours: 3

Prerequisite: IFS 101

Term: WI 2019

Class Time: W 9:00 – 12:45

Class Room: 1

Instructor: [REDACTED]

Office Hours: M TU 11:00 AM – 1:00 P. M.

Telephone:

E-Mail: [REDACTED]

Course Description:

Modeling business work systems with focus on processes and the information technology (IT) to support business processes. The focus is on using IT to create, automate, and integrate business processes. Major topics covered: modeling work systems, major business processes and their relationships, modeling tools, business process/application integration approaches, creating and managing a business process using business process management software.

Teaching Procedure:

Teaching procedures for this course will include professional lectures, class discussions, reading assignments and examinations.

Participation in Class Discussion

Class participation is a very important part of the learning process in this course. Although not explicitly graded, you will be evaluated on the QUALITY of your contributions and insights. Quality comments possess one or more of the following properties:

- Offers a different and unique, but relevant, perspective;
- Contributes to moving the discussion and analysis forward;
- Builds on other comments;
- Transcends the “I feel” syndrome. That is, it includes some evidence, argumentation, or recognition of inherent tradeoffs. In other words, the comment demonstrates some reflective thinking.

We will use our assessment of your participation to manage borderline grades. While your participation grade is subjective, it will not be random or arbitrary. And, clearly, more frequent quality comments are better than less frequent quality comments.

Text:

Fundamentals of Business Process Management, 2nd ed. ISBN: 978-3662565087.

Course Requirements:

Letter grades will be assigned to each student based on a mathematical calculation of the points earned on the examinations. The weights of the exams are:

Term Paper	20%
Class Participation	10%
Midterm	30%
Final	40%

No makeup exams!!!

The course grades are assigned as:

90 – 100%	=	A -
80 – 89%	=	B
70 – 79%	=	C
60 – 69%	=	D
Below 60%	=	F

Note: Scores and grades will not be “curved.” Therefore, any number of students in this course can earn a score of 100 (or 0) on quizzes or exams; and any number of students can earn a grade of “A” (or “F”). By using the preceding factor, a student should constantly be aware of his/her potential final grade in the course. Students are welcome to discuss with the professor regarding to his/her progress or any aspects of the course.

Computer laboratory

Computer laboratory assignments are designed to supplement and reinforce skills acquired in the particular course which lists this course as a co requisite. In this course, there is an in-class lab component attended by the faculty. Usually, about 30% of class time is dedicated to lab. Faculty will be around when the students are doing their lab assignments.

Term Paper

Term paper requires students to write a report on “The Business Process Management Process.” Most global corporations in today’s business world are focusing on their business process and ways to manage those processes in order to become successful and leverage themselves against competitors. The understanding is that efficient business processes are beneficial to the business in the long run when considering factors like cost reduction, meeting customer’s expectations and streamlining business operations to eliminate any loopholes that are detrimental to the business. Change (2016) defines business process management as an approach that focuses on workflow of the firm and in the process divulging any errors that may hinder good performance, hence, it is used to structure a firm’s workflow. Advances in technologies and modern business models are assisting companies improve their business operations and in the process help them gain significant benefits that come with their applications such as automation of processes, increased output, improved knowledge management and sharing of information, increased competitive advantage and enhanced consumer relationship because of better communication and product/service deliver (Kumar 2014). The other role of business management process is to ensure that the developed frameworks are all aligned and that they work to deliver detectable process performance back to the set goals. This paper discusses the impact of Carlson’s business process management and strategy to the overall growth of the

company over the years. The paper is expected to be between 8 and 10 pages in length, including front and back matter. Sections of the paper will be developed throughout the course.

Course Schedule

Week	Topics	Reading Assignments
1	Manufacturing, Services & the Information Economy	Metters et al. Ch. 1
2	Services Strategy Sustainable Strategies	Metters et al. Ch. 2 & 3 Metters et al. Ch. 4 Tragedy of the commons. Wikipedia. DataGuard Systems: Consolidation Through Virtualization. ComputerWorld Honors Program
3	New Service Development Service Operations Concepts	Metters et al. Ch. 5 Metters et al. Ch. 7
4	Process Improvement through Information Flow	Wisner & Stanley Ch. 9 (last chapter in textbook) Churchill, W.L.S. (1949) Their Finest Hour. Book 2, Alone, Ch. (excerpt).
5	Process Modeling: process reconstruction and diagrams	Metters et al. Ch. 9
6	Midterm Exam	
7	Process Modeling case study (review and in-class exercise using the techniques discussed in the previous section)	Metters et al. Ch. 9
8	Process Modeling: simulation system dynamics case study; review and in-class exercise implementing and studying process simulations)	Metters et al. Ch. 14
9	Process Improvement through Quality Control Quality Control case study: Six Sigma	Metters et al. Ch. 10, 11 Hindo, B. (2007) At 3M: a Struggle between Creativity and Innovation; Business Week June 11, 2007 Six Sigma: So Yesterday; Business Week June 11, 2007
10	Managing Supply & Demand Managing Inventory	Metters et al. Ch. 12 Metters et al. Ch. 13
11	Outsourcing & Offshoring Managing Space	Metters et al. Ch. 8 Metters et al. Ch. 16

12	Final Exam	
----	------------	--

Classroom Policies:

Teaching procedures for this course will include professional lectures, class discussions, reading assignments, homework and examinations. You can get policies regarding to the University academic policies from the Student Handbook on the University web-site or in the University catalog.

Attendance, Absence, Lateness, Incomplete:

A course grade of "incomplete" will be given under very unusual circumstances, and only if the student has complete at least 75% of the assigned work by the last day of class and only when an incomplete contract is signed and approved.

Course Outcome:

Upon completion of the course, the student will be able to:

- model simple business processes in terms of people, and activity sequences involved, the data and materials flowing through those sequences and the dependencies between business information and operational activities.
- assess the documented business processes using their key operations characteristics; e.g., efficiency, intended service quality, process flexibility and costs associated with delays, material low volume and level of service or product customization..
- relate the characteristics of a business process with the process' behavior through simulation.
- diagnose problems of and formulate improvements to observed processes and estimate the effects of these improvements in terms of the above process metrics.
- express and explain the concept of business process management (BPM) and its relationships with total quality management (TQM), business process reengineering (BPR) and enterprise resource planning (ERP).

Moodle Forum:

We will use the Moodle Forum to extend the class discussion. I will actively participate in all ongoing discussion threads. This is a good place to engage your classmates in discussions of course topics. To encourage all to participate, contributions to the bulletin boards will be counted towards your class participation points. Other aspects of "class participation" will be discussed on the first day of class.

Academic Honesty:

It is assumed that all students have familiarized themselves with the university's policy on and definition of academic dishonesty. All work should be the student's own - academic honesty is expected of everyone. Those who do not adhere to university and professional expectations with respect to this will be dealt with in accordance with college policy. In general – students will receive a “0” on their work if they either submit work that isn’t their own (including cutting and pasting content from the Internet without proper citation) or allow other students to use their work. A second instance results in failure of the course.

Special Needs and Accommodations:

Please address any special problems or needs at the beginning of the quadmester with the instructor. If you are seeking accommodations based on a disability, you should provide a disability data sheet, which can be obtained from the student services office.

The Learning Environment:

Reagan National University is committed to providing a positive learning environment in which students of all ages and backgrounds can learn together in a setting that encourages the free exchange of ideas and information. To accomplish this goal, the members of the RNU Board have established the following expectations for learning.

- All backgrounds and cultures are respected.
- During class discussions, everyone feels welcome to participate and a free exchange of ideas takes place.
- All members of the class arrive on time and leave the class only on breaks or in case of emergency.
- Distractions are kept to a minimum. Cell phones and other electronic devices are turned off in class, labs, and library. Students remain seated throughout class and refrain from talking with classmates while another class member or the instructor has the floor.
- Each student turns in work that is his or her own.
- Consideration is always given to other classes that are taking place in adjoining classrooms.
- At the end of a class, the members of the class and the instructor leave the classroom in good condition so that the next class can begin without disruption.

Reagan National University Library Services:

RNU's online collection contains over 60,000 volumes comprised of books, journals, videos, and faculty created resources. The Library Research Portal (library@rnu.edu) provides access to multiple services and authoritative resources for academic research including books, articles, texts, visual media, and teaching resources. Appropriate sources include scholarly and peer-reviewed journal articles, scholarly books, and well-respected news magazines and newspapers. The Library offers a large number of appropriate sources and each student is required to attend an online Library orientation. Assistance is available to help students select and locate appropriate sources when RNU is open. The online library is available to students 24 hours 7 days a week. All students can connect to the online library through the computers and laptops available at home and on campus. Each student must use their own pass code to access the library.

As an RNU student, you are required to use the RNU online library, as one source, to assist you in completing a required research paper or project.



Reagan National University

Syllabus

1. Administrative Information:

Course Number: IFS 411

Course Title: Cyber Security

Credit Hours: 3

Prerequisite: IFS 101

Term: WI 2019

Class Time: Friday 2:00 – 5:45

Class Room:

Instructor: [REDACTED]

Office Hours: TH 2:00 – 5:00

Telephone:

E-Mail: [REDACTED]

2. Catalog Description:

This course presents all functional levels within the enterprise to deliver information system security. It provides the technical and analytical skills to implement computer security. It covers topics such as technical, analytical, and communication skills, further engaging students in the practice of cybersecurity. It also focuses on multiple cybersecurity environments, technologies, processes, and concepts.

3. Teaching Procedures:

Teaching procedures for this course will include professional lectures, class discussions, reading assignments and examinations.

Participation in Class Discussion

Class participation is a very important part of the learning process in this course. Although not explicitly graded, you will be evaluated on the **QUALITY** of your contributions and insights. Quality comments possess one or more of the following properties:

- Offers a different and unique, but relevant, perspective;
- Contributes to moving the discussion and analysis forward;
- Builds on other comments;
- Transcends the “I feel” syndrome. That is, it includes some evidence, argumentation, or recognition of inherent tradeoffs. In other words, the comment demonstrates some reflective thinking.

We will use our assessment of your participation to manage borderline grades. While your participation grade is subjective, it will not be random or arbitrary. And, clearly, more frequent quality comments are better than less frequent quality comments.

4. Course Objective

The purpose of this course are:

- _ Master using lexical analyzer and parser generation tools
- _ Master generating intermediate code
- _ Master control-flow and dataflow analysis
- _ Master code optimizations
- _ Be familiar with compiler architecture
- _ Be familiar with generating assembly code
- _ Be familiar with allocating registers

5. Teaching Procedures:

Teaching procedures for this course will include professional lectures, class discussions, reading assignments, term paper, and examinations.

6. Text:

Security in Computing - 5th edition, ISBN13: 978-0134085043, by Charles P. Pfleeger and Shari Lawrence Pfleeger, 2015.

7. Course Requirements:

The evaluation in the class consists of four parts:

- Quizzes (20%)
- Term Paper (20%)
- Midterm Exam (30%)
- Final Exam (30%)

The course grades are assigned as:

90 – 100%	=	A -
80 – 89%	=	B
70 – 79%	=	C
60 – 69%	=	D
Below 60%	=	F

Note: Scores and grades will not be “curved.” Therefore, any number of students in this course can earn a score of 100 (or 0) on quizzes or exams; and any number of students can earn a grade of A (or F.) By using the preceding factor, a student should constantly be aware of his/her potential final grade in the course. Students are welcome to discuss with the professor regarding to his/her progress or any aspects of the course.

Computer laboratory

Computer laboratory assignments are designed to supplement and reinforce skills acquired in the particular course which lists this course as a co requisite. In this course, there is an in-class lab component attended by the faculty. Usually, about 30% of class time is dedicated to lab. Faculty will be around when the students are doing their lab assignments.

8. Term Paper:

Term paper requires students to write a report on “Cyber Security And The Internet Security.” Businesses and people are using Internet for entertainment, e-business and e-commerce, social networking, and communication to the people and business, but there have always been threats to the Internet Security. Internet security is major concern in field of technology, because there are various personal, business and government data on the Internet. Today every businesses and organizations have their own security systems to reach their goals of information security. Internet security systems are created to reduce cyber attack risks, reliability, maintain confidentiality, and compliance with privacy laws and national security laws. However security standard that has been made, and laws brought by government are not more enough to protect Internet Security, so more advanced security and more strict law by government should be

brought in action to protect Internet Security.

There are different kinds of security standards when integrating security approach in new systems. Some government agencies and organizations adopt well-established standards, while some companies make their own private security systems. Storing data Offsite has been beneficial for business to store data on cloud due to storage insufficiency. Devanney, the author of "Offsite Information Storage: Cloud Computing And Cyber Security Issue" explains that The Department of Justice divides cybercrime into three categories: the computer as target, weapon, and as an accessory (p3). Lost Internet connection can heavily affect those organizations, which use PSA system with the cloud. Devanney also claims that current PSA packages are beginning to partner with ERP in order to create more accessible software. The paper is expected to be between 8 and 10 pages in length, including front and back matter. Sections of the paper will be developed throughout the course.

9. Classroom Policies:

Policies regarding to the University academic policies. You can get them from the Student Handbook on the University web-site or in the University catalog.

10. Attendance, Absence, Lateness, Incomplete:

In accordance with the policies of the Si Tanka, class attendance is required, and classes will start promptly at the schedule time. If you are absent or excessively late, you will receive a score of zero for the participation of that class.

A course grade of "incomplete" will be given under very unusual circumstances, and only if the student has complete at least 75% of the assigned work by the last day of class and only when an incomplete contract is signed and approved.

Warning: Any cheating and plagiarism will result in a failing grade in the course.

11. Course Outline:

Week 1 - Overview of Compiling

Week 2 - Lexical Analysis and Scanning

Reading: Complete ch. 1 before class
Project P0 due ("Working with trees")
HW #1 due

Week 3 - Lexical Analysis and Scanning

Reading: Complete ch. 2 before class
Project P1 due ("The E Language")
HW #2 due

Week 4 - Context Free Grammars

Reading: Complete ch. 3 before class
Project P2 due ("Build a lexical scanner")

HW #3 due

Week 5 - Top-Down Parsing

Reading: Complete ch. 4 before class

Project P3 due ("Build a parser")

Quiz # 1

Week 6 – Midterm Exam

Week 7 - Top-Down Parsing

Reading: Begin reading ch. 5

Project P4 due ("Build the Abstract Syntax Tree")

HW #4 due

Week 8 - Bottom-Up Parsing

Reading: Complete ch. 5 before class

HW #5 due

Week 9 - Bottom-Up Parsing

Reading: Begin reading ch. 6

Project P5 due ("Semantic Analysis-part 1")

Quiz #2

Week 10 - Attribute Grammars and Semantic Analysis

Reading: Complete ch. 6 before class

Thanksgiving Holiday - no class

Week 11 - Attribute Grammars and Semantic Analysis

Project P6 due ("Semantic Analysis-part 2")

HW #6 due

Week 12 – Final Exam

12. Course Learning Outcome:

After taking this course, the student will be able to:

- Understand security principles, threats and attack techniques
- Describe authentication and access control
- Describe lattices, reference monitors, and security models
- Understand basic cryptography
- Authentication in distributed systems
- Understand network security and operating system security
- Understand software security and database security

13. Academic Honesty:

It is assumed that all students have familiarized themselves with the university's policy on and

Revised 2019.10

definition of academic dishonesty. All work should be the student's own - academic honesty is expected of everyone. Those who do not adhere to university and professional expectations with respect to this will be dealt with in accordance with college policy. In general – students will receive a 0 on their work if they either submit work that isn't their own (including cutting and pasting content from the Internet without proper citation) or allow other students to use their work. A second instance results in failure of the course.

14. Special Needs and Accommodations:

Please address any special problems or needs at the beginning of the quadmester with the instructor. If you are seeking accommodations based on a disability, you should provide a disability data sheet, which can be obtained from the student services office.

15. The Learning Environment:

Reagan National University is committed to providing a positive learning environment in which students of all ages and backgrounds can learn together in a setting that encourages the free exchange of ideas and information. To accomplish this goal, the members of the RNU Board have established the following expectations for learning.

- All backgrounds and cultures are respected.
- During class discussions, everyone feels welcome to participate and a free exchange of ideas takes place.
- All members of the class arrive on time and leave the class only on breaks or in case of emergency.
- Distractions are kept to a minimum. Cell phones and other electronic devices are turned off in class, labs, and library. Students remain seated throughout class and refrain from talking with classmates while another class member or the instructor has the floor.
- Each student turns in work that is his or her own.
- Consideration is always given to other classes that are taking place in adjoining classrooms.
- At the end of a class, the members of the class and the instructor leave the classroom in good condition so that the next class can begin without disruption.

Reagan National University Library Services:

RNU's online collection contains over 60,000 volumes comprised of books, journals, videos, and faculty created resources. The Library Research Portal (library@rnu.edu) provides access to multiple services and authoritative resources for academic research including books, articles, texts, visual media, and teaching resources. Appropriate sources include scholarly and peer-reviewed journal articles,

scholarly books, and well-respected news magazines and newspapers. The Library offers a large number of appropriate sources and each student is required to attend an online Library orientation. Assistance is available to help students select and locate appropriate sources when RNU is open. The online library is available to students 24 hours 7 days a week. All students can connect to the online library through the computers and laptops available at home and on campus. Each student must use their own pass code to access the library.

As an RNU student, you are required to use the RNU online library, as one source, to assist you in completing a required research paper or project.



Reagan National University

Syllabus

1. Administrative Information:

Course Number: IFS 427

Course Title: The Laws in Cyberspace

Credit Hours: 3

Prerequisite: IFS 101

Term: FA 2018

Class Time: TH 9:00-12:45

Class Room: 4

Instructor: [REDACTED]

Office Hours: M TU 11:00 AM – 1:00 P. M.

Telephone:

E-Mail: [REDACTED]

Catalog Description:

This course covers the essentials of computer and network technologies and it explores specific problems in applying law to cyberspace. It explores the sources of Internet law from intellectual property to tort and the legal complexities. Topics such as intellectual property, privacy, content control and the bounds of jurisdiction will be covered.

Teaching Procedures:

Teaching procedures for this course will include professional lectures, class discussions, reading assignments and examinations.

Participation in Class Discussion

Class participation is a very important part of the learning process in this course. Although not explicitly graded, you will be evaluated on the QUALITY of your contributions and insights. Quality comments possess one or more of the following properties:

- Offers a different and unique, but relevant, perspective;
- Contributes to moving the discussion and analysis forward;
- Builds on other comments;
- Transcends the “I feel” syndrome. That is, it includes some evidence, argumentation, or recognition of inherent tradeoffs. In other words, the comment demonstrates some reflective thinking.

We will use our assessment of your participation to manage borderline grades. While your participation grade is subjective, it will not be random or arbitrary. And, clearly, more frequent quality comments are better than less frequent quality comments.

Text:

James Grimmelmann, *Internet Law: Cases and Problems (8th ed)* ISBN 978-1943689064.

Course Requirements:

Letter grades will be assigned to each student based on a mathematical calculation of the points earned on the examinations. The weights of the exams are:

Contribution to Class	10%
Homework	10%
Midterm	30%
Final	50%

No makeup exams!!!

Revised 2019.10

The course grades are assigned as:

90 – 100% = A -

80 – 89% = B

70 – 79% = C

60 – 69% = D

Below 60% = F

Note: Scores and grades will not be “curved.” Therefore, any number of students in this course can earn a score of 100 (or 0) on quizzes or exams; and any number of students can earn a grade of “A” (or “F”). By using the preceding factor, a student should constantly be aware of his/her potential final grade in the course. Students are welcome to discuss with the professor regarding to his/her progress or any aspects of the course.

Computer laboratory

Computer laboratory assignments are designed to supplement and reinforce skills acquired in the particular course which lists this course as a co requisite. In this course, there is an in-class lab component attended by the faculty. Usually, about 30% of class time is dedicated to lab. Faculty will be around when the students are doing their lab assignments.

Term Paper:

Term paper requires students to write a report on “Freedom of Speech in Cyberspace.” Since the public has logged onto the internet there has been vast amounts of information available. Since the 1990s more and more countries have entered into the information age. Due to the lack of freedom of speech in several countries, censorship has now taken on a prevalent role in the suppression of information. Many countries view a great deal of information as a threat if put into the wrong hands and as a consequence attempt to reduce its availability. However, unlike many of its other counterparts, the United States takes a very liberal stance towards the access if information on the Internet, which is protected by the First Amendment. In contrast to this philosophy, the Saudi Arabian government, in an act to suppress and censor the prevalence of the information on the internet, has established laws and regulations that prohibit public access to the internet for religious and social reasons.

The United States has had internet access for over a decade now and information and usage has flourished. The technology development over the last five years has promoted internet access across the country with internet access in homes and businesses increasing exponentially. With any ISP a person decides to use there is no censorship or filtration system which limits their access to any part of the internet. ISPs and multiple companies’ offer software which helps restrict children’s access to pornographic sites or sites that parents deem harmful to their children, but the companies to explicitly filter the content that is received at a personal computer. The paper is expected to be between 8 and 10 pages in length, including front and back matter. Sections of the paper will be developed throughout the course.

Course Schedule:

Class 1

--Introduction (Theory and Computers) => (pgs. 43-59)

--Jurisdiction: Cyberspace The Internet => (pgs. 61-77)

Class 2

--Law on a Global Internet => (pgs. 78-93)

--Online Borders => (pgs. 94-104)

--Speech Introduction => (pgs. 122-140)

Class 3

--Harmful Speech => (pgs. 141-157)

--Indecent/Pornographic Speech => (pgs. 157-171)

--Filtered Speech => (pgs. 172-181)

--U.S.C. Section 230 and Liability => (pgs. 182-204)

--Privacy: Introduction => (pgs. 205-232)

Class 4

--Privacy: Wiretapping & National Security => (pgs. 233-249, 250-275)

--Privacy: Anonymity => (pgs. 279-295)

--Privacy: Consumer Privacy => (pgs. 296-316)

Class 5

--Social Media and Litigation => (pgs. 317-326)

--Computer Access: Contracts => (pgs. 327-340)

--Computer Access: Misuse => (pgs. 341-357)

--Trademarks: Intro => (pgs. 371-392)

--Trademark: Domain Names => (pgs. 393-407)

Class 6

Midterm Exam

Class 7

Revised 2019.10

--Trademark: Virtual Property => (pgs. 417-446)

--Copyright: Exclusive Rights => (pgs. 447-465)

Class 8

--Copyright: Licensing => (pgs. 466-485)

--Copyright: Fair Use => (pgs. 486-496)

Class 9

--Copyright: Secondary Liability => (pgs. 497-509)

--Copyright: 17 U.S.C. Section 512 => (pgs. 510-531)

--Management and Enforcement Advances => (pgs. 532-562)

Class 10

--Private Power: First Amendment => (pgs. 584-596)

--Private Power: Antitrust => (pgs. 596-610)

Class 11

--Private Power: Net Neutrality => (pgs. 610-642)

Class 12

Final Exam

Classroom Policies:

Teaching procedures for this course will include professional lectures, class discussions, reading assignments, homework and examinations. You can get policies regarding to the University academic policies from the Student Handbook on the University web-site or in the University catalog.

Attendance, Absence, Lateness, Incomplete:

A course grade of “incomplete” will be given under very unusual circumstances, and only if the student has complete at least 75% of the assigned work by the last day of class and only when an incomplete contract is signed and approved.

Course Outcome:

Upon completion of this course, students will be able to:

1. discuss current and developing legal issues in the information technology arena;
2. understand laws regulating the Internet;
3. recommend methods for avoiding legal liability with computer systems;
4. develop an understanding in a chosen area relating to information technology and law;
5. evaluate legal issues in the field from both the perspectives of the private and public sectors in using information technology.

Moodle Forum:

We will use the Moodle Forum to extend the class discussion. I will actively participate in all ongoing discussion threads. This is a good place to engage your classmates in discussions of course topics. To encourage all to participate, contributions to the bulletin boards will be counted towards your class participation points. Other aspects of "class participation" will be discussed on the first day of class.

Academic Honesty:

It is assumed that all students have familiarized themselves with the university's policy on and definition of academic dishonesty. All work should be the student's own - academic honesty is expected of everyone. Those who do not adhere to university and professional expectations with respect to this will be dealt with in accordance with college policy. In general – students will receive a “0” on their work if they either submit work that isn’t their own (including cutting and pasting content from the Internet without proper citation) or allow other students to use their work. A second instance results in failure of the course.

Special Needs and Accommodations:

Please address any special problems or needs at the beginning of the quadmester with the instructor. If you are seeking accommodations based on a disability, you should provide a disability data sheet, which can be obtained from the student services office.

The Learning Environment:

Reagan National University is committed to providing a positive learning environment in which students of all ages and backgrounds can learn together in a setting that encourages the free exchange of ideas and information. To accomplish this goal, the members of the RNU Board have established the following expectations for learning.

- All backgrounds and cultures are respected.
- During class discussions, everyone feels welcome to participate and a free exchange of ideas takes place.

- All members of the class arrive on time and leave the class only on breaks or in case of emergency.
- Distractions are kept to a minimum. Cell phones and other electronic devices are turned off in class, labs, and library. Students remain seated throughout class and refrain from talking with classmates while another class member or the instructor has the floor.
- Each student turns in work that is his or her own.
- Consideration is always given to other classes that are taking place in adjoining classrooms.
- At the end of a class, the members of the class and the instructor leave the classroom in good condition so that the next class can begin without disruption.

Reagan National University Library Services:

RNU's online collection contains over 60,000 volumes comprised of books, journals, videos, and faculty created resources. The Library Research Portal (library@rnu.edu) provides access to multiple services and authoritative resources for academic research including books, articles, texts, visual media, and teaching resources. Appropriate sources include scholarly and peer-reviewed journal articles, scholarly books, and well-respected news magazines and newspapers. The Library offers a large number of appropriate sources and each student is required to attend an online Library orientation. Assistance is available to help students select and locate appropriate sources when RNU is open. The online library is available to students 24 hours 7 days a week. All students can connect to the online library through the computers and laptops available at home and on campus. Each student must use their own pass code to access the library.

As an RNU student, you are required to use the RNU online library, as one source, to assist you in completing a required research paper or project.



Reagan National University

Syllabus

1. Administrative Information:

Course Number: IFS 435

Course Title: Cyber Intelligence

Credit Hours: 3

Prerequisite: IFS 101

Term: WI 2019

Class Time: 2:00 – 5:45

Class Room: 2

Instructor: [REDACTED]

Office Hours: M TU 11:00 AM – 1:00 P. M.

Telephone:

E-Mail: [REDACTED]

Catalog Description:

This course covers intelligence and how it relates to both the physical and cyber domains. It also presents the techniques of computational intelligence, especially evolutionary computation and neural networks and how it enhances human decision making and learning and the automation of computing processes. It also focuses on the development of human source intelligence as a discipline.

Teaching Procedures:

Teaching procedures for this course will include professional lectures, class discussions, reading assignments and examinations.

Participation in Class Discussion

Class participation is a very important part of the learning process in this course. Although not explicitly graded, you will be evaluated on the QUALITY of your contributions and insights. Quality comments possess one or more of the following properties:

- Offers a different and unique, but relevant, perspective;
- Contributes to moving the discussion and analysis forward;
- Builds on other comments;
- Transcends the “I feel” syndrome. That is, it includes some evidence, argumentation, or recognition of inherent tradeoffs. In other words, the comment demonstrates some reflective thinking.

We will use our assessment of your participation to manage borderline grades. While your participation grade is subjective, it will not be random or arbitrary. And, clearly, more frequent quality comments are better than less frequent quality comments.

Text:

The Art of Intelligence: Simulations, Exercises, and Games, William J. Lahneman Rubén Arcos
ISBN-13: 978-1538123461, Rowman & Littlefield

Course Requirements:

Letter grades will be assigned to each student based on a mathematical calculation of the points earned on the examinations. The weights of the exams are:

Contribution to Class	10%
Homework	10%
Midterm	30%
Final	30%

Term Paper 20%

No makeup exams!!!

The course grades are assigned as:

90 – 100% = A -
80 – 89% = B
70 – 79% = C
60 – 69% = D
Below 60% = F

Note: Scores and grades will not be “curved.” Therefore, any number of students in this course can earn a score of 100 (or 0) on quizzes or exams; and any number of students can earn a grade of “A” (or “F”). By using the preceding factor, a student should constantly be aware of his/her potential final grade in the course. Students are welcome to discuss with the professor regarding to his/her progress or any aspects of the course.

Computer laboratory

Computer laboratory assignments are designed to supplement and reinforce skills acquired in the particular course which lists this course as a co requisite. In this course, there is an in-class lab component attended by the faculty. Usually, about 30% of class time is dedicated to lab. Faculty will be around when the students are doing their lab assignments.

Term Paper:

Term paper requires students to write a report on “The Intelligence Cycle.” The Intelligence Cycle is an effective, but outdated model. Essentially, it attempts to visualize intelligence as a process, and not merely a product. As such, by attempting a simple outline of a complex procedure, the cycle will be prone to misrepresenting dynamic changes; operational realities and either over, or under value particular parts of the process. However, it’s core strengths lie in it’s simplicity: shifting through the alphabet soup that is the Intelligence Community and making sense of the entire process is daunting; the Intelligence Cycle attempts to define its movement. This offers people within and out with the Intelligence Community the ability to understand the essential tenets, or goals, within intelligence; that it is essentially a service. Further, simplicity allows change to better suit the environment.

However, as is evident from the recent criticisms of the Intelligence Community (IC), throughout the West in particular , there is a dramatic necessity to reform. In particular, each step of the process, and it’s relationship to the others, is misrepresented in the Intelligence Cycle. Briefly, the Direction phase has to re-evaluate it’s position due to the change in political environment; the collection and anlysis phases are inundanted due to the information age; and the dissemination phase is often misused by policymakers. The paper is expected to be between 8 and 10 pages in length, including front and back matter. Sections of the paper will be developed throughout the course.

Course Schedule:

Class	Topic
1	An Introduction to Cyber Intelligence Pt. 1 Planning and direction Collection
2	An Introduction to Cyber Intelligence Pt. 2 Processing Production Dissemination
3	Developing Your Cyber Intelligence Analyst Skills
4	Cyber Intelligence Collection Operations Pt.1 Passive and Active
5	Cyber Intelligence Collection Operations Pt.2 Hybrid
6	Midterm Exam
7	Cyber Counterintelligence From Theory to Practices Pt.1 Defensive Cyber Counterintelligence
8	Cyber Counterintelligence From Theory to Practices Pt.2 Offensive Cyber Counterintelligence
9	Cyber Threat Intelligence Pt. 1 THREAT
10	Cyber Threat Intelligence Pt. 2 THREAT INTELLIGENCE
11	Cyber Threat Intelligence Pt. 3 INDICATORS OF COMPROMISE
12	Final Exam

Classroom Policies:

Teaching procedures for this course will include professional lectures, class discussions, reading assignments, homework and examinations. You can get policies regarding to the University academic policies from the Student Handbook on the University web-site or in the University catalog.

Attendance, Absence, Lateness, Incomplete:

A course grade of “incomplete” will be given under very unusual circumstances, and only if the student has complete at least 75% of the assigned work by the last day of class and only when an incomplete contract is signed and approved.

Course Outcome:

Students who successfully complete this course will:

1. understand the principles, advantages, limitations and possible applications of machine learning;
2. demonstrate a practical knowledge of machine learning algorithms and methods;
3. apply the appropriate machine learning technique to decision problems;
4. have an overview of the existing techniques for machine learning;
5. adapt the key elements of existing machine learning algorithms.

Moodle Forum:

We will use the Moodle Forum to extend the class discussion. I will actively participate in all ongoing discussion threads. This is a good place to engage your classmates in discussions of course topics. To encourage all to participate, contributions to the bulletin boards will be counted towards your class participation points. Other aspects of "class participation" will be discussed on the first day of class.

Academic Honesty:

It is assumed that all students have familiarized themselves with the university's policy on and definition of academic dishonesty. All work should be the student's own - academic honesty is expected of everyone. Those who do not adhere to university and professional expectations with respect to this will be dealt with in accordance with college policy. In general – students will receive a “0” on their work if they either submit work that isn’t their own (including cutting and pasting content from the Internet without proper citation) or allow other students to use their work. A second instance results in failure of the course.

Special Needs and Accommodations:

Please address any special problems or needs at the beginning of the quadmester with the instructor. If you are seeking accommodations based on a disability, you should provide a disability data sheet, which can be obtained from the student services office.

The Learning Environment:

Reagan National University is committed to providing a positive learning environment in which students of all ages and backgrounds can learn together in a setting that encourages the free exchange of ideas and information. To accomplish this goal, the members of the RNU Board have established the following expectations for learning.

- All backgrounds and cultures are respected.
- During class discussions, everyone feels welcome to participate and a free exchange of ideas takes place.
- All members of the class arrive on time and leave the class only on breaks or in case of emergency.
- Distractions are kept to a minimum. Cell phones and other electronic devices are turned off in class, labs, and library. Students remain seated throughout class and refrain from talking with classmates while another class member or the instructor has the floor.
- Each student turns in work that is his or her own.
- Consideration is always given to other classes that are taking place in adjoining classrooms.
- At the end of a class, the members of the class and the instructor leave the classroom in good condition so that the next class can begin without disruption.

Reagan National University Library Services:

RNU's online collection contains over 60,000 volumes comprised of books, journals, videos, and faculty created resources. The Library Research Portal (library@rmu.edu) provides access to multiple services and authoritative resources for academic research including books, articles, texts, visual media, and teaching resources. Appropriate sources include scholarly and peer-reviewed journal articles, scholarly books, and well-respected news magazines and newspapers. The Library offers a large number of appropriate sources and each student is required to attend an online Library orientation. Assistance is available to help students select and locate appropriate sources when RNU is open. The online library is available to students 24 hours 7 days a week. All students can connect to the online library through the computers and laptops available at home and on campus. Each student must use their own pass code to access the library.

As an RNU student, you are required to use the RNU online library, as one source, to assist you in completing a required research paper or project.



Reagan National University

Syllabus

1. Administrative Information:

Course Number: IFS 439

Course Title: Business Intelligence

Credit Hours: 3

Prerequisite: IFS 101

Term: SP 2019

Class Time: W 9:00 – 12:45

Class Room: 1

Instructor: [REDACTED]

Office Hours: M TU 11:00 AM – 1:00 P. M.

Telephone: [REDACTED]

E-Mail: [REDACTED]

Course Description:

Business intelligence provides the highest level of information support to aid the manager in the decision-making process. This course provides the skills necessary to conceptualize, build, and implement systems utilizing business intelligence in organizations.

Teaching Procedures:

Teaching procedures for this course will include professional lectures, class discussions, reading assignments and examinations.

Participation in Class Discussion

Class participation is a very important part of the learning process in this course. Although not explicitly graded, you will be evaluated on the QUALITY of your contributions and insights. Quality comments possess one or more of the following properties:

- Offers a different and unique, but relevant, perspective;
- Contributes to moving the discussion and analysis forward;
- Builds on other comments;
- Transcends the “I feel” syndrome. That is, it includes some evidence, argumentation, or recognition of inherent tradeoffs. In other words, the comment demonstrates some reflective thinking.

We will use our assessment of your participation to manage borderline grades. While your participation grade is subjective, it will not be random or arbitrary. And, clearly, more frequent quality comments are better than less frequent quality comments.

Text:

Business Intelligence A Managerial Approach 4th ed., 2017.
Author: Turban ISBN: 9781292220543.

Course Requirements:

Letter grades will be assigned to each student based on a mathematical calculation of the points earned on the examinations. The weights of the exams are:

Term Paper	20%
Midterm	40%

Final 40%

No makeup exams!!!

The course grades are assigned as:

90 – 100% = A -
80 – 89% = B
70 – 79% = C
60 – 69% = D
Below 60% = F

Note: Scores and grades will not be “curved.” Therefore, any number of students in this course can earn a score of 100 (or 0) on quizzes or exams; and any number of students can earn a grade of “A” (or “F”). By using the preceding factor, a student should constantly be aware of his/her potential final grade in the course. Students are welcome to discuss with the professor regarding to his/her progress or any aspects of the course.

Computer laboratory

Computer laboratory assignments are designed to supplement and reinforce skills acquired in the particular course which lists this course as a co requisite. In this course, there is an in-class lab component attended by the faculty. Usually, about 30% of class time is dedicated to lab. Faculty will be around when the students are doing their lab assignments.

Term Paper:

Term paper requires students to write a report on “The Power of Business Intelligence.” As the business environment changes and becomes more complicated, enterprises are under huge stress to respond and be innovative to such conditions. Enterprises decision making needs to quick and strategic and so making such decisions can be very complex. What this report of Business intelligence (BI) will describe is the tools available to manager to support such decisions, the possible benefits and the limitations of BI.

Turban et al., (2011, p. 28) describes business intelligence (BI) as ‘an umbrella term that combines architectures, tools, databases, analytical tools, applications, and methodologies. It is a content-free expression, so it means different things to different people’.

The key goal of BI is to allow for interactive access to data which can be in real-time, easy manipulation of the data, and the ability for management to be able to do suitable analysis of the data. Managers are then able to make more accurate and better decisions through BI by looking at old and new data. The paper is expected to be between 8 and 10 pages in length, including front and back matter. Sections of the paper will be developed throughout the course.

Course Schedule:

Week	Topics	Assignments
1	Ch. 1 Intro to Business Intelligence Slides Ch. 1	End of Chapter Case Page 26 – Outline answers to case questions and prepare to discuss next class meeting. Outline to be turned in.
2	Ch.2 Data Warehousing Slides Ch. 2	End of Chapter Case Page 77 – Outline answers to case questions and prepare to discuss next class meeting. Outline to be turned in.
3	Ch. 3 Business Performance Management Slides Ch. 3	End of Chapter Case Page 125 – Outline answers to case questions and prepare to discuss next class meeting. Outline to be turned in.
4	Ch.5 Text, & Web Mining Slides Ch. 5	End of Chapter Case Page 228 – Outline answers to case questions and prepare to discuss next class meeting. Outline to be turned in.
5	Ch.6 BI Emerging Trends Slides Ch. 6	
6	Midterm Exam	
7	Introduction to Data Mining Lecture 1 Slides	Demo XLMiner
8	Overview of the Data Mining Process Lecture 2 Slides	Data Exploration Lecture 3 Slides
9	Assignments Lecture 3: Handout Problems 1 & 2 Toyota Corolla Data, Boston Housing Data and Cereals Data File	Evaluating Classification and Predictive Performance Lecture 4 Slides
10	Assignment Lecture 5: Predicting Boston Housing Prices	Classification Methods: The Naïve Rule, Bayes Rule & k-Nearest Neighbors Lecture 6 Slides
11	Assignments Lecture 6: Personal Loan Acceptance Automobile Accidents	Classification & Regression Trees Lecture 7 Slides
12	Final Exam	

Classroom Policies:

Teaching procedures for this course will include professional lectures, class discussions, reading assignments, homework and examinations. You can get policies regarding to the

Revised 2019.10

University academic policies from the Student Handbook on the University web-site or in the University catalog.

Attendance, Absence, Lateness, Incomplete:

A course grade of “incomplete” will be given under very unusual circumstances, and only if the student has complete at least 75% of the assigned work by the last day of class and only when an incomplete contract is signed and approved.

Course Outcome:

Upon completion of the course, the student will be able to:

- Explain Business Intelligence(BI) and its role in providing a competitive advantage
- Explain the characteristics and goal of Data Warehousing (DW).
- Explain the characteristics and goal of Data Mining (DM).
- Explain the characteristics and goal of Text Mining (TM).
- Explain the characteristics and goal of Web Mining (WM)
- Employ data analysis tools used in DM to in assist in the decision making process

Moodle Forum:

We will use the Moodle Forum to extend the class discussion. I will actively participate in all ongoing discussion threads. This is a good place to engage your classmates in discussions of course topics. To encourage all to participate, contributions to the bulletin boards will be counted towards your class participation points. Other aspects of "class participation" will be discussed on the first day of class.

Academic Honesty:

It is assumed that all students have familiarized themselves with the university's policy on and definition of academic dishonesty. All work should be the student's own - academic honesty is expected of everyone. Those who do not adhere to university and professional expectations with respect to this will be dealt with in accordance with college policy. In general – students will receive a “0” on their work if they either submit work that isn’t their own (including cutting and pasting content from the Internet without proper citation) or allow other students to use their work. A second instance results in failure of the course.

Special Needs and Accommodations:

Please address any special problems or needs at the beginning of the quadmester with the instructor. If you are seeking accommodations based on a disability, you should provide a disability data sheet, which can be obtained from the student services office.

The Learning Environment:

Reagan National University is committed to providing a positive learning environment in which students of all ages and backgrounds can learn together in a setting that encourages the free exchange of ideas and information. To accomplish this goal, the members of the RNU Board have established the following expectations for learning.

- All backgrounds and cultures are respected.
- During class discussions, everyone feels welcome to participate and a free exchange of ideas takes place.
- All members of the class arrive on time and leave the class only on breaks or in case of emergency.
- Distractions are kept to a minimum. Cell phones and other electronic devices are turned off in class, labs, and library. Students remain seated throughout class and refrain from talking with classmates while another class member or the instructor has the floor.
- Each student turns in work that is his or her own.
- Consideration is always given to other classes that are taking place in adjoining classrooms.

At the end of a class, the members of the class and the instructor leave the classroom in good condition so that the next class can begin without disruption.

Reagan National University Library Services:

RNU's online collection contains over 60,000 volumes comprised of books, journals, videos, and faculty created resources. The Library Research Portal (library@rnu.edu) provides access to multiple services and authoritative resources for academic research including books, articles, texts, visual media, and teaching resources. Appropriate sources include scholarly and peer-reviewed journal articles, scholarly books, and well-respected news magazines and newspapers. The Library offers a large number of appropriate sources and each student is required to attend an online Library orientation. Assistance is available to help students select and locate appropriate sources when RNU is open. The online library is available to students 24 hours 7 days a week. All students can connect to the online library through the computers and laptops available at home and on campus. Each student must use their own pass code to access the library.

As an RNU student, you are required to use the RNU online library, as one source, to assist you in completing a required research paper or project.



Reagan National University

Syllabus

1. Administrative Information:

Course Number: IFS 442

Course Title: Software Engineering

Credit Hours: 3

Prerequisite: IFS 101

Term: WI 2019

Class Time: Tuesday 2:00 – 5:45

Class Room: 4

Instructor: [REDACTED]

Office Hours: M TU 11:00 AM – 1:00 P. M.

Telephone: [REDACTED]

E-Mail: [REDACTED]

2. Catalog Description:

This course covers the nature of software and software projects, software development models, software process maturity and project planning. It presents the fundamental concepts and principles that underlie current and emerging methods, tools, and techniques for the cost-effective engineering of high-quality software systems.

3. Teaching Procedures:

Teaching procedures for this course will include professional lectures, class discussions, reading assignments and examinations.

Participation in Class Discussion

Class participation is a very important part of the learning process in this course. Although not explicitly graded, you will be evaluated on the **QUALITY** of your contributions and insights. Quality comments possess one or more of the following properties:

- Offers a different and unique, but relevant, perspective;
- Contributes to moving the discussion and analysis forward;
- Builds on other comments;
- Transcends the “I feel” syndrome. That is, it includes some evidence, argumentation, or recognition of inherent tradeoffs. In other words, the comment demonstrates some reflective thinking.

We will use our assessment of your participation to manage borderline grades. While your participation grade is subjective, it will not be random or arbitrary. And, clearly, more frequent quality comments are better than less frequent quality comments.

4. Text:

Software Engineering - 10th edition, by Ian Sommerville, ISBN13: 978-0133943030

5. Course Requirements:

Letter grades will be assigned to each student based on a mathematical calculation of the points earned on the examinations. The weights of the exams are:

Contribution to Class	10%
Homework	10%
Midterm	30%
Final	30%
Term Paper	20%

No makeup exams!!!

The course grades are assigned as:

90 – 100%	=	A -
80 – 89%	=	B
70 – 79%	=	C
60 – 69%	=	D
Below 60%	=	F

Note: Scores and grades will not be “curved.” Therefore, any number of students in this course can earn a score of 100 (or 0) on quizzes or exams; and any number of students can earn a grade of “A” (or “F”). By using the preceding factor, a student should constantly be aware of his/her potential final grade in the course. Students are welcome to discuss with the professor regarding to his/her progress or any aspects of the course.

Computer laboratory

Computer laboratory assignments are designed to supplement and reinforce skills acquired in the particular course which lists this course as a co requisite. In this course, there is an in-class lab component attended by the faculty. Usually, about 30% of class time is dedicated to lab. Faculty will be around when the students are doing their lab assignments.

Term Paper

Term paper requires students to write a report on “The Role of Requirement Engineering in Software Development.” There is a great importance given to the requirement engineering stage in the SDLC (Software Requirement Life Cycle). It is the backbone which governs all the subsequent processes. Further post requirement defects would largely contribute to the failure of projects, exponentially increased cost etc. In this phase the mission needs and user requirements are received from the client and they would be converted to operational requirements and subsequently to System requirements. Based on system requirements the system would be designed and at the end the system will be developed and tested. Each system requirement should have the traceability with operational requirements and user requirements/ mission needs received from the client. Further if the requirements are not elicited correctly it would impact the increased client dissatisfaction and would result in losing business in the future.. Therefore it is vital systematic requirement engineering process is followed. It is equally important that during Requirement process a very high attention is given to the validation process. The validation of the requirement must be carried out with different stake holders. There could be different stake holders who have different interests in the project. During the validation process of the requirements if all hidden, missing requirements or any gaps were not identified, later in the project it will contribute to scope creep. Therefore at the project inspection all the stake holders need to be identified and grouped at upfront. The paper is expected to be between 8 and 10 pages in length, including front and back matter. Sections of the paper will be developed throughout the course.

Course Schedule

Class	Topic
1	Introduction to Software Engineering Software Processes Source Code Management
2	Feasibility Studies Project Management
3	Legal Aspects of Software Engineering Requirements
4	Usability
5	System Architecture and Design
6	Midterm Exam
7	Object Oriented Design
8	Reliability Performance of Computer Systems
9	People Business Aspects of Software Engineering
10	Delivering the System
11	Risk in Software Development
12	Final Exam

6. **Classroom Policies:**

Teaching procedures for this course will include professional lectures, class discussions, reading assignments, homework and examinations. You can get policies regarding to the University academic policies from the Student Handbook on the University web-site or in the University catalog.

7. **Attendance, Absence, Lateness, Incomplete:**

A course grade of “incomplete” will be given under very unusual circumstances, and only if the student has complete at least 75% of the assigned work by the last day of class and only when an incomplete contract is signed and approved.

8. **Course Outcome:**

At the end of this course, the student should be able to:

1. demonstrate the procedure of converting a valid software design into efficient code;
2. apply the fundamental principles and methods of software engineering;
3. explain software development process models;
4. understand key principles and common methods for software project management;
5. distinguish between the different types and levels of testing software products.

9. Moodle Forum:

We will use the Moodle Forum to extend the class discussion. I will actively participate in all ongoing discussion threads. This is a good place to engage your classmates in discussions of course topics. To encourage all to participate, contributions to the bulletin boards will be counted towards your class participation points. Other aspects of "class participation" will be discussed on the first day of class.

10. Academic Honesty:

It is assumed that all students have familiarized themselves with the university's policy on and definition of academic dishonesty. All work should be the student's own - academic honesty is expected of everyone. Those who do not adhere to university and professional expectations with respect to this will be dealt with in accordance with college policy. In general – students will receive a “0” on their work if they either submit work that isn't their own (including cutting and pasting content from the Internet without proper citation) or allow other students to use their work. A second instance results in failure of the course.

11. The Learning Environment:

Reagan National University is committed to providing a positive learning environment in which students of all ages and backgrounds can learn together in a setting that encourages the free exchange of ideas and information. To accomplish this goal, the members of the University Board have established the following expectations for learning.

- All backgrounds and cultures are respected.
- During class discussions, everyone feels welcome to participate and a free exchange of ideas takes place.
- All members of the class arrive on time and leave the class only on breaks or in case of emergency.
- Each student turns in work that is his or her own.

Reagan National University Library Services:

RNU's online collection contains over 60,000 volumes comprised of books, journals, videos, and faculty created resources. The Library Research Portal (library@rnu.edu) provides access to multiple services and authoritative resources for academic research including books, articles, texts, visual media, and teaching resources. Appropriate sources include scholarly and peer-reviewed journal articles, scholarly books, and well-respected news magazines and newspapers. The Library offers a large number of appropriate sources and each student is required to attend an online Library orientation. Assistance is available to help students select and locate appropriate sources when RNU is open. The online library is available to students 24 hours 7 days a week. All students can connect to the online

library through the computers and laptops available at home and on campus. Each student must use their own pass code to access the library.

As an RNU student, you are required to use the RNU online library, as one source, to assist you in completing a required research paper or project.



Reagan National University

Syllabus

1. Administrative Information:

Course Number: IFS 444

Course Title: Systems Analysis and Design

Credit Hours: 3

Prerequisite: IFS 101

Term: WI 2019

Class Time: W 9:00 – 12:45

Class Room: 1

Instructor: [REDACTED]

Office Hours: M TU 11:00 AM – 1:00 P. M.

Telephone: [REDACTED]

E-Mail: [REDACTED]

Course Description:

Emphasis on development of business application systems using object-oriented and structured analysis tools and techniques for describing processes, use cases, data structures, system objects, file designs, input and output designs, and program specifications. Includes a service-learning project with requirements gathering, planning, and development of a prototype for an internal/external client.

Teaching Procedures:

Teaching procedures for this course will include professional lectures, class discussions, reading assignments and examinations.

Participation in Class Discussion

Class participation is a very important part of the learning process in this course. Although not explicitly graded, you will be evaluated on the **QUALITY** of your contributions and insights. Quality comments possess one or more of the following properties:

- Offers a different and unique, but relevant, perspective;
- Contributes to moving the discussion and analysis forward;
- Builds on other comments;
- Transcends the “I feel” syndrome. That is, it includes some evidence, argumentation, or recognition of inherent tradeoffs. In other words, the comment demonstrates some reflective thinking.

We will use our assessment of your participation to manage borderline grades. While your participation grade is subjective, it will not be random or arbitrary. And, clearly, more frequent quality comments are better than less frequent quality comments.

Text:

Title: Systems Analysis and Design

Author(s): Kenneth E. Kendall and Julie E. Kendall

Publisher: Prentice Hall PTR, 9th Edition, ISBN-13: 978-0133023442.

Course Requirements:

Letter grades will be assigned to each student based on a mathematical calculation of the points earned on the examinations. The weights of the exams are:

Revised 2019.10

Term Paper	20%
Class Participation	10%
Midterm	30%
Final	40%

No makeup exams!!!

The course grades are assigned as:

90 – 100%	=	A -
80 – 89%	=	B
70 – 79%	=	C
60 – 69%	=	D
Below 60%	=	F

Note: Scores and grades will not be “curved.” Therefore, any number of students in this course can earn a score of 100 (or 0) on quizzes or exams; and any number of students can earn a grade of “A” (or “F”). By using the preceding factor, a student should constantly be aware of his/her potential final grade in the course. Students are welcome to discuss with the professor regarding to his/her progress or any aspects of the course.

Computer laboratory

Computer laboratory assignments are designed to supplement and reinforce skills acquired in the particular course which lists this course as a co requisite. In this course, there is an in-class lab component attended by the faculty. Usually, about 30% of class time is dedicated to lab. Faculty will be around when the students are doing their lab assignments.

Term Project:

Term paper requires students to write a report on “Customer Relationship Management Systems.” Customer Relationship Management (CRM) systems are an essential portion of businesses of all sizes. According to the Stair textbook, Principles of Information Systems, “CRM software automates and integrates the functions of sales, marketing, and service in an organization.” (p. 376) (Stair) Research identifies key features of CRM, compares two current software solutions delivering CRM, and recommends the best CRM for the ongoing case, Houston Area Consulting Services (HACS) and their proposed Remote Access and TeleCommunication System (RATS). The two CRM systems reviewed and compared are Microsoft Dynamics CRM and Sugar CRM.

Most Customer Relationship Management (CRM) systems provide several key features:

- a. Electronic database to manage potential and existing customers via contacts, sales and advertising
- b. Customer service tools for sales and service
- c. Web-based option to communicate and access information

- d. Multiple languages for international business
- e. Analysis of customer information to increase sales and customer retention with loyal customer rewards (Wikipedia.org) The paper is expected to be between 8 and 10 pages in length, including front and back matter. Sections of the paper will be developed throughout the course.

Course Schedule:

Week	Topics	Homework/reports and their due dates
1	System Analysis Fundamentals: Introducing SA&D SA&D concepts, Roles of system analyst.	Tutorial 1
2	The system development life cycle, Using CASE tools. Depicting system graphically, determining feasibility, activity planning and control.	Tutorial 2 Assignment 1
3	Information requirements analysis: Sampling and investigating data, interviewing. Using questionnaires	Tutorial 3
4	Prototyping	Tutorial 4
5	The analysis process Using data flow diagram; Using data dictionaries	Assignment 2
6	Midterm Exam	
7	Describing process specifications and structured decisions; The system proposal.	Tutorial 5
8	Designing data	
9	Designing the file or database Designing the user interface	Tutorial 6, Assignment 3
10	Designing data Documenting the design phase	Tutorial 7
11	Software engineering and implementation Quality assurance through software engineering; Implementing the information system	Seminar
12	Final Exam	

Classroom Policies:

Teaching procedures for this course will include professional lectures, class discussions, reading assignments, homework and examinations. You can get policies regarding to the University academic policies from the Student Handbook on the University web-site or in the University catalog.

Attendance, Absence, Lateness, Incomplete:

A course grade of “incomplete” will be given under very unusual circumstances, and only if the student has complete at least 75% of the assigned work by the last day of class and only when an incomplete contract is signed and approved.

Course Outcome:

Upon completion of the course, the student will be able to:

- a. Define and describe the five phases of the system development life cycle.
- b. State at least five expected benefits from systems projects.
- c. Explain at least three ways in which information systems support business requirements.
- d. Describe how systems analysts interact with users, management, and other information systems professionals.
- e. Develop data flow diagrams and decision tables.
- f. Perform a feasibility study.
- g. Evaluate systems development alternatives.
- h. Solve realistic systems analysis problems.

Moodle Forum:

We will use the Moodle Forum to extend the class discussion. I will actively participate in all ongoing discussion threads. This is a good place to engage your classmates in discussions of course topics. To encourage all to participate, contributions to the bulletin boards will be counted towards your class participation points. Other aspects of "class participation" will be discussed on the first day of class.

Academic Honesty:

It is assumed that all students have familiarized themselves with the university's policy on and definition of academic dishonesty. All work should be the student's own - academic honesty is expected of everyone. Those who do not adhere to university and professional expectations with respect to this will be dealt with in accordance with college policy. In general – students

will receive a “0” on their work if they either submit work that isn’t their own (including cutting and pasting content from the Internet without proper citation) or allow other students to use their work. A second instance results in failure of the course.

Special Needs and Accommodations:

Please address any special problems or needs at the beginning of the quadmester with the instructor. If you are seeking accommodations based on a disability, you should provide a disability data sheet, which can be obtained from the student services office.

The Learning Environment:

Reagan National University is committed to providing a positive learning environment in which students of all ages and backgrounds can learn together in a setting that encourages the free exchange of ideas and information. To accomplish this goal, the members of the RNU Board have established the following expectations for learning.

- All backgrounds and cultures are respected.
- During class discussions, everyone feels welcome to participate and a free exchange of ideas takes place.
- All members of the class arrive on time and leave the class only on breaks or in case of emergency.
- Distractions are kept to a minimum. Cell phones and other electronic devices are turned off in class, labs, and library. Students remain seated throughout class and refrain from talking with classmates while another class member or the instructor has the floor.
- Each student turns in work that is his or her own.
- Consideration is always given to other classes that are taking place in adjoining classrooms.

At the end of a class, the members of the class and the instructor leave the classroom in good condition so that the next class can begin without disruption.

Reagan National University Library Services:

RNU’s online collection contains over 60,000 volumes comprised of books, journals, videos, and faculty created resources. The Library Research Portal (library@rnu.edu) provides access to multiple services and authoritative resources for academic research including books, articles, texts, visual media, and teaching resources. Appropriate sources include scholarly and peer-reviewed journal articles, scholarly books, and well-respected news magazines and newspapers. The Library offers a large number of appropriate sources and each student is required to attend an online Library orientation. Assistance is available to help students select and locate appropriate sources when RNU is open. The

online library is available to students 24 hours 7 days a week. All students can connect to the online library through the computers and laptops available at home and on campus. Each student must use their own pass code to access the library.

As an RNU student, you are required to use the RNU online library, as one source, to assist you in completing a required research paper or project.



Reagan National University

Syllabus

1. Administrative Information:

Course Number:	IFS 499
Course Title:	Information Systems Project
Credit Hours:	3
Prerequisite:	At least 8 IFS courses completed.
Term:	SP 2019
Class Time:	Monday 14:00 – 17:45
Class Room:	2
Instructor:	██████████
Office Hours:	F 9:00 – 12:00
Telephone:	
E-Mail:	████████████████████

Course Description: This is a special course for selected students to carry out research under the guidance of a faculty member. This course requires the student to prepare a proposal, which must be approved by the Department Chair.

Course Information:

This is the capstone course for the Information Systems major and should be taken in the student's later quarmester. The student shall have more than 8 major courses completed in their concentration to complete in their degree program prior to enrolling in this course. The goal of the course is for students to integrate the concepts of the Information Systems concentration and prepare individuals for positions that use information technology to develop computer-based systems that support organizations.

Teaching Procedures:

Teaching procedures for this course will include professional lectures, class discussions, reading assignments and examinations.

Participation in Class Discussion

Class participation is a very important part of the learning process in this course. Although not explicitly graded, you will be evaluated on the QUALITY of your contributions and insights. Quality comments possess one or more of the following properties:

- Offers a different and unique, but relevant, perspective;
- Contributes to moving the discussion and analysis forward;
- Builds on other comments;
- Transcends the “I feel” syndrome. That is, it includes some evidence, argumentation, or recognition of inherent tradeoffs. In other words, the comment demonstrates some reflective thinking.

We will use our assessment of your participation to manage borderline grades. While your participation grade is subjective, it will not be random or arbitrary. And, clearly, more frequent quality comments are better than less frequent quality comments.

Text:

Reading materials provided by the instructor.

Course Requirements:

Letter grades will be assigned to each student based on a mathematical calculation of the points earned on the examinations. The weights of the exams are:

Contribution to Class	20%
Final Presentation	30%
Final Project.....	50%

No makeup exams!!!

The course grades are assigned as:

91 – 100%	-- A
81 – 90%	-- B
71 – 80%	-- C
61 – 70%	-- D
Below 61%	-- F

Note: Scores and grades will not be “curved.” Therefore, any number of students in this course can earn a score of 100 (or 0) on quizzes or exams; and any number of students can earn a grade of “A” (or “F”). By using the preceding factor, a student should constantly be aware of his/her potential final grade in the course. Students are welcome to discuss with the professor regarding to his/her progress or any aspects of the course.

Term Paper:

This project must include a research component, even if the focus is on developing an applied system. Students are also encouraged to discuss the Research Topics with faculty. Students may apply to work in groups as long as the individual roles and assessments are clearly defined. Students may also work on a team but again, the individual roles and assessment criteria must be clearly defined in the project proposal, and the project must be supervised by an RNU faculty.

Along with evidence that they have completed all the credits necessary to take IFS 499, students must submit a draft project proposal to the course professor before final registration in the course can be approved. This will include a description of the student's academic record and work experience. It should also include a statement from the proposed project supervisor, if the proposed supervisor is from outside of RNU faculty, outlining her or his qualifications and willingness to work with the student.

The project can be part of the student's own work duties, a special project for an employer, or a project suggested by a professor, but the work must be new and yet to be completed through the course of study. For students in the CS or MIS program, the project can be more academic-oriented research or an applied project towards the development of an applied information system. For students in the MIS major or other related programs, the project can be towards the analysis and design of an information system with minimal or no implementation.

In any case, the draft project proposal must include a well-worded description of the project and must also explain the rationale, the objectives and the importance of the project. The draft proposal should be around 1200 words long, and where necessary, should include a brief literature review with references. The project must consist of new work to be done by the student during the course. The draft proposal may need to be revised or even completely rewritten to ensure the suitability of the project for the course.

Course Schedule

Week	Topic
1	Introduction + Overview Lecture
2	Engineering Design I: Needs
3	Engineering Design II: Design Criteria, Evaluation
4	Planning and Project Management, Testing, and Communication
5	Proposal Presentations
6	Technical Survey
7	CDR Presentations
8	Project Demo (1)
9	Project Demo (2)
10	Project Demo (3)
11	Introduction to Capstone
12	Final Presentations

Classroom Policies:

Teaching procedures for this course will include professional lectures, class discussions, reading assignments, homework and examinations. You can get policies regarding to the University academic policies from the Student Handbook on the University web-site or in the University catalog.

Attendance, Absence, Lateness, Incomplete:

A course grade of “incomplete” will be given under very unusual circumstances, and only if the student has complete at least 75% of the assigned work by the last day of class and only when an incomplete contract is signed and approved.

Course Outcome:

Students who successfully complete this course will be able to:

1. Collect, analyze and interpret information.
2. Design and implement computer information systems programs.
3. Examine the theoretical and logical understanding of computer architecture and operation.
4. Analyze and apply the functions and operations of an organization, including accounting, management, marketing, finance, and other related faculty-approved business or organizational content.
5. Demonstrate an understanding of the historical development, current status and future trends of computing to enable students to adapt easily to rapid changes in computer technology.
6. Demonstrate an understanding of the social, psychological, ethical, political, economic and environmental impacts of computing technology.

7. Examine how information technology supports a global economy by helping to overcome cultural, national and diversity issues.
8. Describe how data and voice are transmitted across a network.
9. Identify differences between wireless and wired transmissions.
10. Describe security issues and concerns for wired and wireless networks.
11. Understand the physical structure of the Internet.

Moodle Forum:

We will use the Moodle Forum to extend the class discussion. I will actively participate in all ongoing discussion threads. This is a good place to engage your classmates in discussions of course topics. To encourage all to participate, contributions to the bulletin boards will be counted towards your class participation points. Other aspects of "class participation" will be discussed on the first day of class.

Academic Honesty:

It is assumed that all students have familiarized themselves with the university's policy on and definition of academic dishonesty. All work should be the student's own - academic honesty is expected of everyone. Those who do not adhere to university and professional expectations with respect to this will be dealt with in accordance with college policy. In general – students will receive a “0” on their work if they either submit work that isn’t their own (including cutting and pasting content from the Internet without proper citation) or allow other students to use their work. A second instance results in failure of the course.

Special Needs and Accommodations:

Please address any special problems or needs at the beginning of the quadmester with the instructor. If you are seeking accommodations based on a disability, you should provide a disability data sheet, which can be obtained from the student services office.

The Learning Environment:

Reagan National University is committed to providing a positive learning environment in which students of all ages and backgrounds can learn together in a setting that encourages the free exchange of ideas and information. To accomplish this goal, the members of the RNU Board have established the following expectations for learning.

- All backgrounds and cultures are respected.
- During class discussions, everyone feels welcome to participate and a free exchange of ideas takes place.
- All members of the class arrive on time and leave the class only on breaks or in case of emergency.

- Distractions are kept to a minimum. Cell phones and other electronic devices are turned off in class, labs, and library. Students remain seated throughout class and refrain from talking with classmates while another class member or the instructor has the floor.
- Each student turns in work that is his or her own.
- Consideration is always given to other classes that are taking place in adjoining classrooms.
- At the end of a class, the members of the class and the instructor leave the classroom in good condition so that the next class can begin without disruption.

Reagan National University Library Services:

RNU's online collection contains over 60,000 volumes comprised of books, journals, videos, and faculty created resources. The Library Research Portal (library@rnu.edu) provides access to multiple services and authoritative resources for academic research including books, articles, texts, visual media, and teaching resources. Appropriate sources include scholarly and peer-reviewed journal articles, scholarly books, and well-respected news magazines and newspapers. The Library offers a large number of appropriate sources and each student is required to attend an online Library orientation. Assistance is available to help students select and locate appropriate sources when RNU is open. The online library is available to students 24 hours 7 days a week. All students can connect to the online library through the computers and laptops available at home and on campus. Each student must use their own pass code to access the library.

As an RNU student, you are required to use the RNU online library, as one source, to assist you in completing a required research paper or project.



Reagan National University

Syllabus

1. **Administrative Information:**

Course Number: IFS 500

Course Title: Information Technology for Managers

Credit Hours: 3

Prerequisite: Permission from Instructor.

Term: FA 2018

Class Time: F 9:00-12:45

Class Room: 2

Instructor: [REDACTED]

Office Hours: SA – 1:00 – 2:30 P. M.

Telephone:

E-Mail: [REDACTED]

2. Course Description

This course presents an introduction to information systems and dominant supportive technologies. It explores necessary management actions to use of the best practices and methods such as: information systems architectures, software and hardware standards, database management systems, transaction processing, e-commerce, for improvement for already in place.

3. Teaching Procedures

Teaching procedures for this course will include professional lectures, class discussions, reading assignments and examinations.

Participation in Class Discussion

Class participation is a very important part of the learning process in this course. Although not explicitly graded, you will be evaluated on the QUALITY of your contributions and insights. Quality comments possess one or more of the following properties:

- Offers a different and unique, but relevant, perspective;
- Contributes to moving the discussion and analysis forward;
- Builds on other comments;
- Transcends the “I feel” syndrome. That is, it includes some evidence, argumentation, or recognition of inherent tradeoffs. In other words, the comment demonstrates some reflective thinking.

We will use our assessment of your participation to manage borderline grades. While your participation grade is subjective, it will not be random or arbitrary. And, clearly, more frequent quality comments are better than less frequent quality comments.

4. Learning Objectives

The purpose of this course is to prepare advanced management students to be effective exploiters of computer/communications technologies now and in the future. The focus of this course is on the opportunities and pitfalls provided by these technologies; the resources (computer and microelectronics, networks, software, data and people) that organizations provide and alternative approaches to managing them; and what the user-manager needs to know to make effective use of these technologies. Information technology has been changing at a dizzying pace. Systems analysis and design has seen the growth of various methods for analyzing and designing computer systems for business applications, as well as the advent of a number of tools to assist people in the use of these methods. This course has a system project orientation, explaining the process of analyzing and designing systems and the various methods and tools that aid in developing, maintaining and managing information systems.

5. Textbook

Principles of Information Systems: A Managerial Approach, 9th edition, Ralph M. Stair and George W. Reynolds. Course Technology, One Main St., Cambridge, MA 02142.

6. Course Requirements and Grading

Each student will be expected to complete two take-home assignments (Term Papers), and take the mid-term and final examinations during the quadmester.

*****Students are required to have an E-mail address throughout the term.**

Term Papers

The subjects and other details of the term papers will be announced in class.

A late penalty of 20% deduction will be applied to all paper received after deadlines.

Examinations

Mid-term and final examinations will be given in form of case study and short questions.

A penalty of 10% deduction will be applied to all make-up exams which should be pre-approved by the instructor one week prior to the scheduled exams.

Letter grades will be assigned to each student based on a mathematical calculation of the points earned on the papers and examinations completed. Grades will not be "curved." Therefore, any number of students in this course can earn a grade of A (or F) on the papers and examinations for the course as a whole.

Class Attendance and Participation	10%
Term Papers	40%
Mid-term examination	20%
Final examination	30%

The course grades are assigned as:

90 – 100%	=	A
80 – 89%	=	B
70 – 79%	=	C
Below 70%	=	F

Term Paper

Term paper requires students to write a report on "Information Technology and Management." Information Technology and Management explores the many different technologies inherent in the field of information technology and their impact on information systems design, functionality, operations, and management. The journal takes a broad view of information systems as systems that not only include machines but human beings as well. As a result, the journal is an important outlet for studies concerning the man/machine interface, human factors, and organizational issues. Moreover, the journal explores the managerial issues and the strategic issues that arise from the management of information technology. The paper is expected to be between 8 and 10 pages in length, including front and back matter. Sections of the paper will be developed throughout the course.

6. Academic Integrity

When university officials award credit, degrees, and certificates, they must assume the absolute integrity of the work done by you; therefore, it is important that you maintain the highest standard of honor in your scholastic work.

Academic dishonesty cannot be condoned. When such misconduct is established as having occurred, it subjects you to possible disciplinary actions ranging from admonition to dismissal, along with any grade penalty the instructor might, in appropriate cases, impose. Procedural safeguards of due process and appeal are available to students in disciplinary matters.

Academic dishonesty, as a general rule, involves one of the following acts:

1. Cheating on an examination or quiz, including the giving, receiving or soliciting of information and the unauthorized use of notes or other materials during the examination or quiz.
2. Buying, selling, stealing or soliciting any material purported to be the unreleased contents of a forthcoming examination, or the use of such material.
3. Substituting for another person during an examination or allowing such substitution for one's self.
4. Plagiarism. This is the act of appropriating passages from the work of another individual, either word for word or in substance, and representing them as one's own work. This includes any submission of written work other than one's own.
5. Collusion with another person in the preparation or editing assignments submitted for credit, unless such collaboration has been in advance by the instructor.
6. Knowingly furnishing false information to the university forgery and alteration or use of University documents or instruments of identification with the intent to defraud.

7. Class Operations and Expectations

Teaching procedures for this course will include lectures, discussion, case studies, reading assignments, writing assignments and examinations. In this class, students are expected to review the required reading before coming to the class. Students are expected to actively participate in class discussion.

The case study method of analysis is a major teaching and examination tool in this class. The case study method is designed to systematically analyze the cases in the text and determine the principle(s) or rule(s) of managing information systems that each case teaches. This method aids the students in cultivating the skills for distilling the crucial facts of a case, developing the issue or question in various management problems. This method also teaches the students how to match a set of facts with management concepts and principles that produced the outcome obtained.

8. Class Calendar and Schedule of Due Dates

<u>Date</u>	<u>Main Topics</u>	<u>Readings</u>
Week 1	Introduction: Business in Information Age	

	Introduction to Information Systems System Approach/System Theory Information Systems in Organizations: Competitive Advantages	Ch. 1-2
Week 2	Information Technology Concepts: Hardware: Input, Processing, Output Software: Systems & Application Software	Ch. 3-4
Week 3	Programming Languages Organizing Data and Information	Ch. 4-5
Week 4	The Hierarchy of Data Database Management; Database Model	Ch. 5
Week 5	Emerging Database Trends	Ch. 5
Week 6	1st Term Paper Due Mid-term Examination	
Week 7	Telecommunications and Networks The Internet and Intranets E-Commerce	Ch. 6-8
Week 8	Business Information Systems: <ul style="list-style-type: none"> • Transaction Processing Systems • Management Information Systems • Decision Support Systems • Executive Support Systems 	Ch. 9-11
Week 9	Business on Internet: E-Commerce	
Week 10	System Development Life Cycle System Investigation and Analysis Security and Ethical Issues in MIS	Ch. 12-14
Week 11	Special Topics on Internet and MIS	
Week 12	2nd Term Paper Due Final Exam	

9. Course Learning Outcomes

After completing this course students should be able to:

1. Recognize, analyze, and suggest various types of information-communication systems/services that are encountered in everyday life and in the business world.
2. Integrate business and IT strategies and services, and analyze their strategic impact on the business world.
3. Identify issues and implications of IT management.

10. Bibliography and Research

Additional Readings: Students are encouraged to do outside readings related to the course material.

- *The Road Ahead*, by Bill Gates, Viking Press, 1995 (ISBN 0-670-77289-5)
- *Bold New World: The Essential Road Map to the 21st Century*, William Knoke, Kodansha International, 1996.
- *A Practical Guide to Information Systems Process Improvement* by Anita Cassidy, Keith Guggenberger
- *IT Manager's Handbook: Getting Your New Job Done* by Bill Holtsnider, Brian D. Jaffe
- *IT Architectures and Middleware: Strategies for Building Large, Integrated Systems* by Chris Britton
- *Visualizing Project Management : A Model for Business and Technical Success* by Kevin Forsberg, et al
- *Digital Darwinism : 7 Breakthrough Business Strategies for Surviving in the Cutthroat Web Economy* by Evan I. Schwartz
- *Telecommunications Deregulation (Artech House Telecommunications Library)* by James K. Shaw
- *Digital Signal Integrity: Modeling and Simulation with Interconnects and Packages (Prentice Hall Modern Semiconductor Design Series)* by Brian Young
- *High Performance Printed Circuit Boards* by Charles A. Harper (Editor)
- *High Speed Digital Design: A Handbook of Black Magic* by Howard W., Ph.D. Johnson, Martin, Ph.D. Graham
- *Digital Systems Engineering* by William J. Dally, John W. Poulton

Research with InfoTrac: Students are required to conduct research after regular classes. InfoTrac is one of the most advanced on-line research tools. Access to InfoTrac is available to all UNVA students through the University Library. Contact the librarian for more information on InfoTrac and other research resources available at the UNVA Library.

11. Administrative Issues

Attendance

Education is cooperative endeavor between a student and his or her instructor. Instructors plan a variety of learning activities to help their student's master the course content. Your contribution is to participate in these activities within the framework established in the class syllabus. Faculty will identify specific class attendance policies in the class syllabus, which is distributed at the beginning of each term. Successful learning requires good communication between students and instructors, in the most cases regular classroom attendance is essential.

It is your responsibility to inform your instructor prior to an absence for class of this is requested by the instructor in the class syllabus. You are responsible for making up all course work missed during the absence. In the event of unexplained absences, your instructor may administratively withdraw you from the course.

Incomplete Work

A course grade of "Incomplete" will be given under very unusual circumstances, and only if the student has completed at least 75% of the assigned work by the last day of class and only when an Incomplete Contract is completed and approved.

12. Academic Honesty:

It is assumed that all students have familiarized themselves with the university's policy on and definition of academic dishonesty. All work should be the student's own - academic honesty is expected of everyone. Those who do not adhere to university and professional expectations with respect to this will be dealt with in accordance with college policy. In general – students will receive a 0 on their work if they either submit work that isn't their own (including cutting and pasting content from the Internet without proper citation) or allow other students to use their work. A second instance results in failure of the course.

13. Special Needs and Accommodations:

Please address any special problems or needs at the beginning of the quadmester with the instructor. If you are seeking accommodations based on a disability, you should provide a disability data sheet, which can be obtained from the student services office.

14. The Learning Environment:

Reagan National University is committed to providing a positive learning environment in which students of all ages and backgrounds can learn together in a setting that encourages the free exchange of ideas and information. To accomplish this goal, the members of the RNU Board have established the following expectations for learning.

- All backgrounds and cultures are respected.
- During class discussions, everyone feels welcome to participate and a free exchange of ideas takes place.
- All members of the class arrive on time and leave the class only on breaks or in case of emergency.
- Distractions are kept to a minimum. Cell phones and other electronic devices are turned off in class, labs, and library. Students remain seated throughout class and refrain from talking with classmates while another class member or the instructor has the floor.
- Each student turns in work that is his or her own.
- Consideration is always given to other classes that are taking place in adjoining classrooms.
- At the end of a class, the members of the class and the instructor leave the classroom in good condition so that the next class can begin without disruption.

Reagan National University Library Services:

RNU's online collection contains over 60,000 volumes comprised of books, journals, videos, and faculty created resources. The Library Research Portal (library@rmu.edu) provides access to multiple services and authoritative resources for academic research including books, articles, texts, visual media, and teaching resources. Appropriate sources include scholarly and peer-reviewed journal articles, scholarly books, and well-respected news magazines

and newspapers. The Library offers a large number of appropriate sources and each student is required to attend an online Library orientation. Assistance is available to help students select and locate appropriate sources when RNU is open. The online library is available to students 24 hours 7 days a week. All students can connect to the online library through the computers and laptops available at home and on campus. Each student must use their own pass code to access the library.

As an RNU student, you are required to use the RNU online library, as one source, to assist you in completing a required research paper or project.



Reagan National University

Syllabus

1. Administrative Information:

Course Number: LAW 510

Course Title: Law and Legal Reasoning

Credit Hours: 3

Prerequisite: MGT 500

Term: WI 2019

Class Time: SA 9:00 – 12:45

Class Room: 2

Instructor: [REDACTED]

Office Hours: F 9:00 – 12:00

Telephone:

E-Mail: [REDACTED]

Course Description:

This course introduces the American legal system and the types of legal reasoning used by lawyers and judges. It covers the nature, function and application of the U.S. legal system as it applies to the modern business environment. It also examines the American legal system's role in the development and growth of business with an emphasis on ethics and business decision making.

Teaching Procedures:

Teaching procedures for this course will include professional lectures, class discussions, reading assignments and examinations.

Participation in Class Discussion

Class participation is a very important part of the learning process in this course. Although not explicitly graded, you will be evaluated on the QUALITY of your contributions and insights. Quality comments possess one or more of the following properties:

- Offers a different and unique, but relevant, perspective;
- Contributes to moving the discussion and analysis forward;
- Builds on other comments;
- Transcends the "I feel" syndrome. That is, it includes some evidence, argumentation, or recognition of inherent tradeoffs. In other words, the comment demonstrates some reflective thinking.

We will use our assessment of your participation to manage borderline grades. While your participation grade is subjective, it will not be random or arbitrary. And, clearly, more frequent quality comments are better than less frequent quality comments.

Text:

Required books:

An Introduction To Law and Legal Reasoning (Introduction to Law Series) 3rd Edition, by Steven J. Burton, ISBN-13: 978-0735562776.

Methodology:

This course will utilize instructional methodologies, including lectures, case analyses, presentations, role playing, simulation exercises, guest speakers, visual aids and films. Students will be organized in groups and are expected to work as a team on relevant group assignments.

Evaluation:

1. Grading:

Final grade is based on three (3) exams, including the final, a research paper, case analyses, reports and critiques, problem-solving, in class projects, outlines, participation and timelines in completing assignments. Grade distribution will be as follows:

Exam #1	25%
Exam #2	25%
Exam #3	25% (Final)
Research Paper	15%
*Other	10%
Total	100%

* Includes portfolio of group assignments, such as case briefings, problem solving, quizzes, outlines, projects. Credit will be given for in class group assignments and participations.

2. Scale:

The following grading scale will be used:

90 – 100%	=	A
80 – 89%	=	B
70 – 79%	=	C
Below 70%	=	F

Course Schedule

Class	Topic	Reading
1	General introduction to persuasive writing, legal citation, and hierarchy of legal authority How not to write “like a lawyer”	Mockingbird, Ch. 1-9 Plain English, Ch. 1-4, Exercises 2-7 Zoltan v. Commissioner, 79 T.C. 490 (1982) (handout) Nevilson v. Marshoogle, 2010 National Order of Scribes winner (Statement of Facts only) DeLuca v. Lord, 77 F.3d 578 (2d Cir. 1996)
2	The attorney as storyteller	Plain English, Ch. 5-6, Exercises 9-14 Mockingbird, Ch. 10-16 Thinking, Ch. 1-3 Mapp v. Ohio, 367 U.S. 643 (1961)
3	Sentence building	Thinking, Ch. 8-9 Parents Involved in Community Schools v. Seattle School District No. 1, 551 U.S. 701 (2007) United States v. Locke, 471 U.S. 84 (1985) Church of the Holy Trinity v. United States, 143 U.S. 457 (1892)
4	Legal research	Reread Thinking, Ch. 6 Riggs v. Palmer, 115 N.Y. 506 (1889)9

		Hoffman Plastic Compounds, Inc. v. National Labor Relations Board, 535 U.S. 137 (2002) Reread Thinking, Ch. 8 “Remarks on the theory of appellate decisions and the ruled or canons about how statutes are to be construed,” Vand. L. Rev. 395 (1950) McBoyle v. U.S., 283 U.S. 25 (1931)
5	Citations as breadcrumbs	“A critical guide to vehicles in the park,” 83 N.Y.U. L. Rev. 1109 (2008) State v. Stanko, 974 P.2d 1132 (Mont. 1998) U.S. v. Millis, 621 F.3d 914 (9th Cir. 2010)
6	Midterm Exam	
7	Citations as breadcrumbs	Thinking, Ch. 8-9 Parents Involved in Community Schools v. Seattle School District No. 1, 551 U.S. 701 (2007) United States v. Locke, 471 U.S. 84 (1985) Church of the Holy Trinity v. United States, 143 U.S. 457 (1892)
8	Introduction to common law and equity	Plain English, Ch. 9, Exercise 18 Mockingbird, Ch. 22-30 “Petitioner’s Motion to Withdraw Petition” (handout)
9	Canons of statutory interpretation	Reread Thinking, Ch. 8 “Remarks on the theory of appellate decisions and the ruled or canons about how statutes are to be construed,” Vand. L. Rev. 395 (1950) McBoyle v. U.S., 283 U.S. 25 (1931)
10	Drafting statutes	Letters, Ch. 1-11 Lawrence v. Texas, 539 U.S. 558 (2003) Salinas v. Texas, 133 S.Ct. 928 (2013) United States v. Martinez-Fuerte, 428 U.S. 543 (1976)
11	A scattershot introduction to civil liberties	Letters, Ch. 12-37 Texas Disciplinary Rules of Professional Conduct ²⁰ (read rules and skim commentary)
12	Final Exam	

3. Evaluation Standards:

Written and other assignments will be evaluated according to the following standards:

A. Term Paper:

1. A well-defined thesis includes the purpose or assumption or hypothesis of your research.

2. Differentiation of your paper/project from any current research.
3. Logical integration of information to support or disprove your thesis.
4. Organizational consistency, orderly flow and relevancy and effectiveness of sequential ideas and paragraphs to the central theme of your thesis. Grammatically correct construction, spelling and punctuation.
5. Timeliness and scope of research. Submit, on the due date, a 8-10 page, thoroughly research term paper. Your topic must deal with a current aspect of the course and has to be submitted in writing to the professor for his approval, no later than the fourth (4th) class meeting. Your submission should include the following:
 - a. topic of your choice;
 - b. thesis statement; and
 - c. sample outline and bibliography of references including articles from law journals obtained through the Index to Legal Periodicals, Lexis/Nexis, World Wide Web, and other methodologies for accessing information.
6. The caliber, quality and depth of research as reflected in the nature of the subject matter, and the sources utilized in your citation and bibliographical documentation including the use of articles from the Index to Legal Periodicals, in particular.
7. The final paper must:
 - a. be typed, double-spaced, stapled and pages numbered;
 - b. Have footnotes or end notes with correct citations;
 - c. Have a bibliography of sources used; and
 - d. Include, for each entry, the author, title, publisher, year and pages
8. The caliber, nature and quality of the subject matter for research. Your paper must be typed and stapled.

B. Examination

1. Demonstrated ability to identify issues and provide a succinct resolution to the problem.
2. Your answer should include the following elements based on the given facts:

- a. issue identification;
 - b. answer;
 - c. general rule;
 - d. rationale incorporating case reference; and
 - e. result
3. Logical coherence of your answer and integration of the requisite elements as noted in (2) above. Grammatically accurate responses.

C. Case Analysis and Briefs

Briefing of cases and Socratic analyses are standard methodologies utilized in the instructional approach for law courses. You will be required to brief assigned cases on a regular basis. The definition, format and elements of a brief are explained below:

Definition: A brief is a succinct condensation of essential case information in an organized manner. In briefing a case, organize the relevant information in accordance with the following format:

Facts: In no more than a paragraph explain what has happened. It is as though you were telling a “story” to someone who has not read what the case is about. If the case is on appeal, include the ruling of the lower courts.

Issue: This is the main question that the court must decide. Normally the issue is stated in a question form. It is as though you were the judge and you are telling someone what the question is that you must decide to resolve a certain problem; specify the issue which the highest court must resolve. The case citation will tell you which court or body is deciding the case.

Holding: This is what the court has decided in response to the issue. It is simply a matter of writing the word “yes” or “no” followed by a few words of explanation if you wish.

Rationale: This is the reason for the court’s decision. The court is telling you why it decided the way it did. You should be concerned with the decision of the highest court.

Rule of Law: This is what the case stands for if it is to be used as a precedent in future cases. It is what you would tell someone in one sentence or so, using the appropriate legal terms, what the case stands for as a rule to be applied in the future.

Case Analysis (*do this only if you are asked by the instructor*): Follow the same format as in briefing a case except that you add a separate category “Analysis”

under “Rationale”. In your analysis you are required to say why you agree or disagree with court’s decision. The concurring or dissenting opinion, if there is one, will provide you with ideas.

Format Requirements: Your brief should adhere to the following:

1. No more than one page, single-spaced.
2. Put your name in the upper right-hand corner.
3. Cite case at top center of page. Example of correct citation:

Price Waterhouse v. Hopkins, 490 U.S. 228 (2012)

(The “490” refers to the volume which, in this case, is the United States Reports, and “228” refers to the page where the case begins, and “2010” refers to the year.)

4. Points will be deducted or you might be asked to resubmit for grammatical mistakes or faulty expression.

Presentation:

- i. Articulateness and knowledge of subject matter.
- ii. Accuracy of issue identification, answer, rationale and rule with regard to cases. Also ability to think logically and critically and provide dissenting views cogently.
- iii. Manner and style of presentation.
- iv. Response to questions.
- v. Ability to maintain interest of class.

Student Requirements:

1. Attendance:

Attend classes regularly and on time. In the event of a missed class, please check with your group for necessary information.

2. Participation:

Participate positively in class and conduct yourself professionally.

Note: Credit will be given for in class group assignments and participation.

3. Preparation:

Read and study the assigned text and other related materials ahead of time. Prepare critical questions on reading assignments for class discussion.

4. Assignments:

- a. Submit assignments on time. Points will be deducted for late submissions unless otherwise indicated. Multiple pages must be stapled. Typing your work is preferred.
- b. You are responsible for keeping copies of all your work including graded exams and assignments and should be able to produce the same if needed.

5. Cooperation:

Cooperate with your members and work as a team on assigned projects.

6. Research:

Conduct research in a timely and professional manner in accordance with prior defined expectations.

7. Examination:

- Scheduled exams: Take all exams on the regularly scheduled date.
- Make ups: There will be no make up exams except in cases of verifiable emergency or illness.

8. Academic Integrity:

All students are expected to conduct themselves in a manner consistent with the University College's policy on Academic Integrity in the Student Policy Manual and the Catalog.

9. Portfolios:

Each group is required to maintain a portfolio of all written in class and other specific group assignments which will be submitted to the instructor for evaluation. Contents of the portfolio may include written case briefs, solutions to problems, outlines, projects, etc. This is a collaborative group effort and credit will only be earned for assignments in which you have participated as computed under "other" in the grading evaluation category.

Miscellaneous:

Modification:

The Instructor reserves the right to modify the above requirements based on class consensus or at his discretion with prior notice to the class.

Course Learning Outcome:

Upon completing the requirements for this course, the student will be able to:

- A. Identify the sources of law and describe their effects.
- B. Describe the court system and court procedure.
- C. Describe the nature and classes of contracts.
- D. Identify the elements needed to create a contract.
- E. Read, interpret contracts, and cases.
- F. Discuss the effect of the following upon contracts:

- 1) fraud
- 2) duress
- 3) undue influence
- 4) contractual capacity
- 5) consideration

Academic Honesty:

It is assumed that all students have familiarized themselves with the university's policy on and definition of academic dishonesty. All work should be the student's own - academic honesty is expected of everyone. Those who do not adhere to university and professional expectations with respect to this will be dealt with in accordance with college policy. In general – students will receive a 0 on their work if they either submit work that isn't their own (including cutting and pasting content from the Internet without proper citation) or allow other students to use their work. A second instance results in failure of the course.

Special Needs and Accommodations:

Please address any special problems or needs at the beginning of the quadmester with the instructor. If you are seeking accommodations based on a disability, you should provide a disability data sheet, which can be obtained from the student services office.

The Learning Environment:

Reagan National University is committed to providing a positive learning environment in which students of all ages and backgrounds can learn together in a setting that encourages the free exchange of ideas and information. To accomplish this goal, the members of the RNU Board have established the following expectations for learning.

- All backgrounds and cultures are respected.
- During class discussions, everyone feels welcome to participate and a free exchange of ideas takes place.
- All members of the class arrive on time and leave the class only on breaks or in case of emergency.
- Distractions are kept to a minimum. Cell phones and other electronic devices are turned off in class, labs, and library. Students remain seated throughout class and refrain from talking with classmates while another class member or the instructor has the floor.
- Each student turns in work that is his or her own.

- Consideration is always given to other classes that are taking place in adjoining classrooms.
- At the end of a class, the members of the class and the instructor leave the classroom in good condition so that the next class can begin without disruption.

Reagan National University Library Services:

RNU's online collection contains over 60,000 volumes comprised of books, journals, videos, and faculty created resources. The Library Research Portal (library@mu.edu) provides access to multiple services and authoritative resources for academic research including books, articles, texts, visual media, and teaching resources. Appropriate sources include scholarly and peer-reviewed journal articles, scholarly books, and well-respected news magazines and newspapers. The Library offers a large number of appropriate sources and each student is required to attend an online Library orientation. Assistance is available to help students select and locate appropriate sources when RNU is open. The online library is available to students 24 hours 7 days a week. All students can connect to the online library through the computers and laptops available at home and on campus. Each student must use their own pass code to access the library.

As an RNU student, you are required to use the RNU online library, as one source, to assist you in completing a required research paper or project.



Reagan National University

Syllabus

1. Administrative Information:

Course Number: MAT 103

Course Title: College Algebra

Credit Hours: 3

Prerequisite: No prerequisite.

Term: WI 2019

Class Time: SA 9:00-12:45

Class Room: 3

Instructor: [REDACTED]

Office Hours: M TU 11:00 AM – 1:00 P. M.

Telephone:

E-Mail: [REDACTED]

Course Description

This course provides a solid foundation in algebraic operations such as linear, quadratic, polynomial, rational, inverse, exponential and logarithmic functions. It also covers topics as solve equations involving these functions, and systems of linear equations in two variables, as well as inequalities.

Teaching Procedures

Teaching procedures for this course will include professional lectures, class discussions, reading assignments and examinations.

Participation in Class Discussion

Class participation is a very important part of the learning process in this course. Although not explicitly graded, you will be evaluated on the QUALITY of your contributions and insights. Quality comments possess one or more of the following properties:

- Offers a different and unique, but relevant, perspective;
- Contributes to moving the discussion and analysis forward;
- Builds on other comments;
- Transcends the “I feel” syndrome. That is, it includes some evidence, argumentation, or recognition of inherent tradeoffs. In other words, the comment demonstrates some reflective thinking.

We will use our assessment of your participation to manage borderline grades. While your participation grade is subjective, it will not be random or arbitrary. And, clearly, more frequent quality comments are better than less frequent quality comments.

Texts

College Algebra, Larson and Hostetler, 7th edition.

Assignments & Exams

Grading	
Midterm Exam	20%
Homework	20%
Final	30%
Term Paper	20%
Attendance	10%

The course grades are assigned as:

$$90 - 100\% = A -$$

80 – 89%	=	B
70 – 79%	=	C
60 – 69%	=	D
Below 60%	=	F

Grades & Submission of Work

Attendance Policy Attendance will be taken daily. Excessive absences may result in you being dropped from the course. Occasions will sometimes arise that will necessitate students leaving class early. If you let me know before class there will be no problem. If you leave early without letting me know why, then I will count you absent for that day. Absences are neither excused nor unexcused. It is the responsibility of the student to schedule an appointment with the instructor or obtain the information from another student to find out what material was missed.

Exams. Each exam will be worth 80 points. The exam dates may be determined by our progress and class preference. Any concepts mentioned in class or the book may appear on an exam and calculators may be necessary. Working homework is an excellent way to prepare for the exams. If there is enough interest, and if I have time, we will have an out-of-class review before an exam.

Term Paper. Term paper requires students to write a report on “Why Algebra.” Until recent history, mathematics had not been taught to the general population. Only those who were rich, powerful, and/or politically connected were given the opportunity to study math beyond basic counting operations. Many of my junior high students are excited about the prospects of returning to this situation. I have the opportunity to teach remedial math and math study skills courses for a local university. Many of the college students with whom I am involved are going back to school after many years in the work force. Most of them experience a high degree of math anxiety because they have forgotten much of the algebra they learned in school. They've forgotten it because they don't use algebra in their daily lives. In fact, many college students are quite successful in their various programs of study and yet struggle to pass their general algebra requirements. And almost everyone breaks into a cold sweat at the mere mention of the words "story problems". Given the high anxiety level associated with the subject and the fact that so much of what we learn in algebra is not used by the general population, why is it so important that we teach it? Be honest! When was the last time you needed to factor a polynomial or to find the asymptotes in a rational expression. Unless you must use these ideas in your work, your answer is probably "huh?"

Don't get me wrong, I think there are compelling reasons to teach algebra to the general population. The first reason, of course, is utility. We use much of the algebra we've learned every day.

The paper is expected to be between 8 and 10 pages in length, including front and back matter. Sections of the paper will be developed throughout the course.

Exam Redo. If the median grade for an exam (except the final) is less than 70%, then I'll allow you to redo it. I will not curve any exam. Please follow these instructions for the redo:

1. Use a blue ink pen for all the redo work.
2. Cross out all wrong work with the pen.
3. You aren't required to completely rework a problem.
4. The corrected work should be done on the test - don't hand in solutions on a separate piece of paper.
5. The redone test is due the class day after I return the test.
6. You may use your notes, the book, a tutor, or work together to help you get the answers. All I ask is that you understand any corrections that you make to the test.

Failure to follow any of the above instructions will result in deducted points. When your test is returned a second time, it will have a red and a green number at the top. The red number is the score you earned when you took the test in class; the green number is the score for the re-graded test. I will record the average of these scores in my grade book. For example, if you got a 69/80 when you took the test in class, and a 78/80 on the redo, then I will record a $(69+78)/2=74=92\%$ for that test.

Cheating and Plagiarism

Your assignments should be original pieces of work. I have absolutely no tolerance for plagiarism. Plagiarism is defined as presenting work as your own when it is not. In other words, if you turn in an assignment that you did not actually do it, you are plagiarizing (aka cheating).

Over the years, I have found that people usually cheat for one of two reasons: lack of time or fear. When an assignment seems too difficult to do, or if the deadline is coming up and you don't have time to do a good job, please do not resort to downloading something off the Internet. Instead, ask for help – from me.

In addition, plagiarizers may also be eligible for a number of other unpleasant punishments, such as removal from the class and possibly the university. I have failed many people for cheating. Don't do it.

Class Courtesy

In order to create a positive learning environment for all members of the class, I ask that you observe the following general guidelines:

- Please set your cell phone / pager to silent or vibrate mode before entering class.
- If you need to step out of the room during class, please do so as quickly and quietly as possible.
- Come to class on time. If you do arrive late, please enter quietly and sit down immediately.
- Please do not whisper to your neighbors while I or other students are talking to the class.
- Do not pack up your books and papers until AFTER class has ended.

- Treat your fellow students with respect, and learn to be a good listener.

Late & Make-Up Policy

Assignments are due at the beginning of class on the due date. Anything turned in after this (even if it is just an hour or two later) will be counted late. If you know you are going to be absent from class, you should turn your work in ahead of time, or email it to me by the time it is due.

Because I know that most RNU students lead complex lives, I allow each student **three late assignments**. Three times during the semester, you may turn in an assignment in NOT MORE THAN ONE WEEK AFTER THE ORIGINAL DUE DATE and still receive full credit. However, be aware that I will put your late work at the bottom of my grading pile, and you may not get feedback for several weeks. **I will not accept the assignment more than one week after the original due date.**

The exception to this policy is the final draft of the research paper, which **must** be turned in on time.

After the third late assignment, I will take off 10% (one letter grade) for every day (day, not class day) that the assignment is late. Again, I will not accept an assignment more than one week after its due date.

If you have serious health or family issues which are making it difficult for you to meet deadlines, please let me know so that we can work together to find ways of helping you succeed in the class.

Attendance & Withdrawal Policy

Regular attendance is important. Much of the material that will be covered in lectures is not in the book; therefore, if you miss class you will be missing important information which may be needed to complete the assignments. If you do miss class, the responsibility for making up assignments and getting lecture notes is entirely yours. Also, please note that I do not award points for attendance or participation.

If you wish to withdraw, the responsibility for doing so is entirely yours, and you **must** do so before the final withdrawal date. **Do not assume that I will automatically withdraw you if you stop showing up.**

Assigned Homework The tentative assignments are shown below. Homework is only collected during the fall and spring semesters. One problem will be randomly chosen to be graded. Note that you should work more than the assigned problems to master the material. Not showing your work may result in a grade of zero. I will not accept homework submitted after I have returned the graded homework to the class for any reason. I might allow late homework to be submitted if you turn it in at least 5 minutes before the time that class begins, but I will deduct 10% for every day that the homework

is late. Either put it in my office door or lay it on the classroom desk. The lowest 3 homework scores will be dropped. **You must work much more than the assigned homework to master the material, and possibly even pass the course.**

Problems	Section	Due Date
3, 14, 28, 59, 70, 72	Graphs of Equations	1.1
6, 16, 26, 35, 69, 80	Lines in the Plane	1.2
4, 6, 10b, 14, 34, 38, 65, 93	Functions	1.3
4, 12, 17, 24, 35, 43, 66, 83	Graphs of Functions	1.4
14f, 15, 28, 47, 66	Shifting, Reflecting, and Stretching Graphs	1.5
21, 25, 30, 36, 61, 70, 85	Combinations of Functions	1.6
18, 42, 46, 60, 74, 85	Inverse Functions	1.7
1, 9, 19, 21, 24, 35, 38	Variation	Var
Chapter 1 and Variation		Exam 1
1d, 7, 15, 33, 59, 68	Modeling with Linear Equations	2.1
22, 24, 39, 60, 66	Solving Equations Graphically	2.2
2, 6, 18, 30, 46, 65, 85, 110, 139	Solving Equations Algebraically	2.4
6d, 23, 29, 62b	Solving Inequalities Algebraically and Graphically	2.5
10b, 32, 39, 57, 64, 78	Quadratic Functions	3.1
11c, 55, 74, 80, 89, 96, 100	Polynomial Functions of Higher Degree	3.2
13, 30, 34	Rational Functions and Asymptotes	3.5
Chapter 2 and 3		Exam 2
7, 12, 30, 58, 62, 63, 67, 78	Exponential Functions and Their Graphs	4.1
7, 17, 23, 30, 38, 55, 68, 76, 84	Logarithmic Functions and Their Graphs	4.2
5, 35, 61, 78, 89, 96	Properties of Logarithms	4.3
2b, 27, 38, 55, 81, 119(change "least" to "most")	Solving Exponential and Logarithmic Functions	4.4
16, 25, 32, 43, 70	Exponential and Logarithmic Models	4.5
1b, 25, 74	Solving Systems of Equations	5.1
3, 8, 26, 68	Systems of Linear Equations in Two Variables	5.2
Chapter 4 - 5.2		Exam 3
2c, 20, 34, 43, 47, 89, 99	Multivariable Linear Systems	5.3
30, 33, 37b, 40, 58, 65	Systems of Inequalities	5.4
15, 35, 42	Linear Programming	5.5
23, 31, 40, 60, 78, 87, 96	Sequences and Series	7.1
15, 28, 41, 49, 60, 87	Arithmetic Sequences and Partial Sums	7.2
5, 33, 53, 65, 93, 103	Geometric Sequences and Series	7.3
	Counting Principles	7.6
	Probability	7.7

Comprehensive with emphasis on untested sections	Final	
---	--------------	--

Suggested Additional Homework The following homework will not but collected. However, the more problems you work, the more you will learn. The answers to the odd-numbered exercises are in the back of the book. Practice the homework in a timely manner, or you will fail the exams and inevitably, the course.

Section	Problems
Intro; 1.1	1, 5, 7, 11, 13, 17, 21, 25, 31, 33, 39, 41, 49, 53, 55, 61, 63, 69, 71, 73, 75
1.2	1, 3, 5, 9, 13, 17, 23, 25, 31, 35, 39, 41, 43, 49, 57, 59, 61, 63, 67, 69, 73, 75, 79, 81, 83, 89, 93, 95
1.3	1 – 85 every other odd, 91, 99, 101
1.4	1 – 81 every other odd, 85, 87, 95
1.5	1 – 25 every other odd, 29, 33, 35, 41, 45, 53, 59, 65, 69, 71, 75, 77
1.6	1 – 55 every other odd, 57, 67, 69, 79, 81, 89
1.7	3, 4, 17, 19, 23, 43, 51
2.1	15, 17, 19, 21, 25, 35, 41, 43, 53, 65, 67
2.2	1, 3, 11, 15, 35, 39, 43, 55, 61
2.4	5, 7, 11, 33, 39, 43, 45, 47, 61, 65, 67, 71, 109, 121, 124, 130
2.5	11, 15, 17, 23, 29, 33, 45, 49, 51, 54, 55, 59, 69
3.1	1, 5, 15, 17, 19, 23, 25, 28, 31, 35, 39, 43, 49, 57, 71, 73, 78
3.2	9, 10, 11, 12, 17, 21, 22, 27, 33, 41, 45, 47, 57, 59, 65, 74, 76, 77, 79, 100
3.5	1, 5, 7, 9, 11, 13, 17, 17, 27, 29, 31, 33, 37
3.6	1 – 61 every other odd, 71, 73
4.1	15, 17, 19, 23, 24, 45, 47, 51, 59, 63, 69, 70, 71, 73, 75, 78
4.2	1, 3, 9, 11, 15, 19, 21, 25, 27, 29, 31, 35, 39, 41, 43, 47, 49, 53, 55, 57, 61, 63, 67, 75, 76
4.3	3, 5, 9, 27, 29, 31, 35, 43, 49, 51, 60, 73, 79, 81, 95
4.4	1, 15, 23, 27, 29, 31, 43, 49, 53, 79, 83, 91, 94, 95, 107, 117, 125
4.5	72 a, b, 73 a, b
5.1	15, 17, 23, 29, 39, 72
5.2	11, 13, 15, 21, 41, 45, 69, 71
5.4	15, 19, 39, 41, 43, 47, 49, 57, 65
5.5	1 – 25 every other odd, 27, 35, 43
6.3	1, 5, 9, 11, 13, 21, 23, 27, 43, 45, 47, 49, 59
7.1	1, 7, 11, 13, 17, 19, 23, 27, 29, 31, 33, 51, 55, 57, 59, 79, 81, 83, 85, 89, 95, 97, 99, 101
7.2	1, 3, 5, 9, 11, 13, 17, 18, 21, 23, 25, 29, 32, 35, 41, 59, 60, 65, 67

7.3	1, 3, 5, 11, 13, 21, 23, 27, 29, 37, 39
7.6	9, 11, 17, 19, 21, 25, 29, 33, 37, 39, 45, 51
7.7	1, 3, 7, 9, 11, 13, 17, 21, 25, 33, 35

Class Schedule

Class I. PREREQUISITES

Real Numbers and Their Properties; Integral Exponents and Scientific Notation; Rational Exponents and Radicals; Polynomial and Rational Expressions, Complex Numbers

Class II. EQUATIONS, INEQUALITIES And MODELING

Equations in One Variable; Modeling to Solve Problems; Equations and Graphs In Two Variables; Linear Equations in Two Variables; Scatter Diagrams and Curve Fitting; Quadratic Equations; Linear and Absolute Value Inequalities.

Class III. FUNCTIONS And GRAPHS

Functions; Graphs of Relations and Functions; Families of Functions, Transformations, and Symmetry; Operations with Functions, Inverse Functions, Constructing Functions with Variation.

Class IV. POLYNOMIAL And RATIONAL FUNCTIONS

Quadratic Functions and Inequalities; Complex Numbers; Zeros of Polynomial Functions; Theory of Equations; Miscellaneous Equations; Graphs of Polynomial Functions; Rational Functions and Inequalities.

Class V. EXPONENTIAL And LOGARITHMIC FUNCTIONS

Exponential Functions and Their Applications; Logarithmic Functions and Their Applications; Rules of Logarithms; More Equations and Applications.

Class VI. Midterm Exam

Class VII. SYSTEMS Of EQUATIONS And INEQUALITIES

Systems of Linear Equations in Two Variables; Systems of Linear Equations in Three Variables; Nonlinear Systems of Equations; Partial Fractions; Inequalities And Systems of Inequalities in Two Variables; Linear Programming.

Class VIII. MATRICES And DETERMINANTS

Solving Linear Systems Using Matrices; Operations with Matrices; Multiplication of Matrices; Solution of Linear Systems in Two Variables Using Determinants; Solutions of Linear Systems in Three Variables Using Determinants.

Class IX. The CONIC SECTIONS

The Parabola; The Ellipse and the Circle; The Hyperbola.

Class X. SEQUENCES, SERIES, And PROBABILITY (Optional)

Sequences; Series; Geometric Sequences and Series; Counting and Permutations; Combinations, Labeling and the Binomial Theorem; Probability; Mathematical

Class XI. EXPONENTIALS & LOGARITHMA

Definitions & Graphs of Exponential Functions; Exponential Growth & Decay; Logarithmic Functions; Exponential & Logarithmic Applications

Class XII. Final Exam

Learning and other Disabilities

Please note that if you are a student who has been diagnosed with learning disabilities, you are entitled by state law to have accommodations in this and other college classes. Please advise me if this is the case and I will be happy to make whatever arrangements are appropriate for your situation. If you would like to tape lectures or arrange for someone to take notes for you, please feel free to do so.

If you have any other type of disability or medical condition that you would like me to know about, please tell me. Of course, such matters are private and you are not obligated to tell me anything if you don't want to.

Course Learning Outcomes

Upon successful completion of this course, the student will develop the algebraic skills required for the study of calculus. In particular, the student will:

1. Know the structure and properties of the real number system.
2. Solve linear and quadratic equations/inequalities.
3. Sketch graphs of linear and quadratic functions.
4. Determine equations for lines.
5. Solve systems of linear equations in two or three variables algebraically or by using Cramer's rule.
6. Use functional notation and operations.
7. Identify the domain and range of various functions and sketch their graphs.
8. Graph and find the zeroes of polynomial functions.

9. Use the properties of logarithms.
10. Solve exponential and logarithmic equations.

Academic Honesty:

It is assumed that all students have familiarized themselves with the university's policy on and definition of academic dishonesty. All work should be the student's own - academic honesty is expected of everyone. Those who do not adhere to university and professional expectations with respect to this will be dealt with in accordance with college policy. In general – students will receive a 0 on their work if they either submit work that isn't their own (including cutting and pasting content from the Internet without proper citation) or allow other students to use their work. A second instance results in failure of the course.

Special Needs and Accommodations:

Please address any special problems or needs at the beginning of the quadmester with the instructor. If you are seeking accommodations based on a disability, you should provide a disability data sheet, which can be obtained from the student services office.

The Learning Environment:

Reagan National University is committed to providing a positive learning environment in which students of all ages and backgrounds can learn together in a setting that encourages the free exchange of ideas and information. To accomplish this goal, the members of the RNU Board have established the following expectations for learning.

- All backgrounds and cultures are respected.
- During class discussions, everyone feels welcome to participate and a free exchange of ideas takes place.
- All members of the class arrive on time and leave the class only on breaks or in case of emergency.
- Distractions are kept to a minimum. Cell phones and other electronic devices are turned off in class, labs, and library. Students remain seated throughout class and refrain from talking with classmates while another class member or the instructor has the floor.
- Each student turns in work that is his or her own.
- Consideration is always given to other classes that are taking place in adjoining classrooms.
- At the end of a class, the members of the class and the instructor leave the classroom in good condition so that the next class can begin without disruption.

Reagan National University Library Services:

RNU's online collection contains over 60,000 volumes comprised of books, journals, videos, and faculty created resources. The Library Research Portal (library@rnu.edu) provides access to multiple services and authoritative resources for academic research including books, articles, texts, visual media, and teaching resources. Appropriate sources include scholarly and peer-reviewed journal articles, scholarly books, and well-respected news magazines and newspapers. The Library offers a large number of appropriate sources and each student is required to attend an online Library orientation. Assistance is available to help students select and locate appropriate sources when RNU is open. The online library is available to students 24 hours 7 days a week. All students can connect to the online library through the computers and laptops available at home and on campus. Each student must use their own pass code to access the library.

As an RNU student, you are required to use the RNU online library, as one source, to assist you in completing a required research paper or project.



Reagan National University

Syllabus

1. Administrative Information:

Course Number: MAT 114

Course Title: Mathematics for Computer Science

Credit Hours: 3

Prerequisite: No prerequisite.

Term: SP 2019

Class Time: W 14:00-17:45

Class Room: 3

Instructor: [REDACTED]

Office Hours: M TU 11:00 AM – 1:00 P. M.

Telephone: [REDACTED]

E-Mail: [REDACTED]

Catalog Description:

This course is an introduction to the mathematics underlying computer science. It covers fundamental concepts and tools in discrete mathematics with emphasis on their applications to computer science. It covers topics like logic and Boolean circuits; sets, functions, finite automata, randomized algorithms, and analysis techniques.

Teaching Procedures:

Teaching procedures for this course will include professional lectures, class discussions, reading assignments and examinations.

Participation in Class Discussion

Class participation is a very important part of the learning process in this course. Although not explicitly graded, you will be evaluated on the QUALITY of your contributions and insights. Quality comments possess one or more of the following properties:

- Offers a different and unique, but relevant, perspective;
- Contributes to moving the discussion and analysis forward;
- Builds on other comments;
- Transcends the “I feel” syndrome. That is, it includes some evidence, argumentation, or recognition of inherent tradeoffs. In other words, the comment demonstrates some reflective thinking.

We will use our assessment of your participation to manage borderline grades. While your participation grade is subjective, it will not be random or arbitrary. And, clearly, more frequent quality comments are better than less frequent quality comments.

Text:

Mathematical Structures for Computer Science - 7th edition, by Judith L. Gersting,
ISBN13: 978-1429215107

Course Requirements:

Letter grades will be assigned to each student based on a mathematical calculation of the points earned on the examinations. The weights of the exams are:

Contribution to Class	10%
Homework	10%
Midterm	30%
Final	30%
Term Project	20%

No makeup exams!!!

The course grades are assigned as:

90 – 100% = A -

80 – 89% = B

70 – 79% = C

60 – 69% = D

Below 60% = F

Note: Scores and grades will not be “curved.” Therefore, any number of students in this course can earn a score of 100 (or 0) on quizzes or exams; and any number of students can earn a grade of “A” (or “F”). By using the preceding factor, a student should constantly be aware of his/her potential final grade in the course. Students are welcome to discuss with the professor regarding to his/her progress or any aspects of the course.

Term Project:

Term paper requires students to write a report on “Mathematics And Computer Science Degree.” In the realm of mathematics and applied mathematics, I am especially interested in numerical methods for partial differential equations, fluid dynamics, dynamical systems, scientific computing and Optimization. The magic of mathematics that attracts me most is solving the most sophisticated problems in the real world through different applied methods which are based on the rigorous theoretical analysis.

This research study mainly focuses on solving the Riemann Problem of Hyperbolic Equations, developing different numerical methods with specific accuracies for Inviscid Burgers Equation, and discussing the stability of each method by coding the scheme and proving their specific CFL conditions

The paper is expected to be between 8 and 10 pages in length, including front and back matter. Sections of the paper will be developed throughout the course.

Classroom Policies:

Teaching procedures for this course will include professional lectures, class discussions, reading assignments, homework and examinations. You can get policies regarding to the University academic policies from the Student Handbook on the University web-site or in the University catalog.

Attendance, Absence, Lateness, Incomplete:

A course grade of “incomplete” will be given under very unusual circumstances, and only if the

student has complete at least 75% of the assigned work by the last day of class and only when an incomplete contract is signed and approved.

Course Learning Outcomes:

At the end of this course, the student should be able to:

1. utilize mathematical structures common to computer science;
2. understand examples and perform operations on sets, functions, relations, propositional and predicate logic;
3. implement mathematical models of computing languages and machines;
4. apply mathematical thinking and processes to problem solving;
5. relate the mathematical concepts to practical applications of computer science.

Moodle Forum:

We will use the Moodle Forum to extend the class discussion. I will actively participate in all ongoing discussion threads. This is a good place to engage your classmates in discussions of course topics. To encourage all to participate, contributions to the bulletin boards will be counted towards your class participation points. Other aspects of "class participation" will be discussed on the first day of class.

Academic Honesty:

It is assumed that all students have familiarized themselves with the university's policy on and definition of academic dishonesty. All work should be the student's own - academic honesty is expected of everyone. Those who do not adhere to university and professional expectations with respect to this will be dealt with in accordance with college policy. In general – students will receive a “0” on their work if they either submit work that isn't their own (including cutting and pasting content from the Internet without proper citation) or allow other students to use their work. A second instance results in failure of the course.

Class Schedule:

Class 1	Boolean Functions
Class 2	Number Systems
	Computer Arithmetic
Class 3	Logic circuits and registers
	Propositions and logic

Class 4	Implication and translation
	Predicate Logic
Class 5	Numbers and primes
Class 6	Midterm Exam
Class 7	Remainders and modular arithmetic
	GCD and Euclidean Algorithm
Class 8	Number theory
	Relations and their properties
Class 9	Equivalence relations
	Orders and posets
Class 10	Sums and induction
	Sequences
Class 11	More induction
	Review
Class 12	Final Exam

Special Needs and Accommodations:

Please address any special problems or needs at the beginning of the quadmester with the instructor. If you are seeking accommodations based on a disability, you should provide a disability data sheet, which can be obtained from the student services office.

The Learning Environment:

Reagan National University is committed to providing a positive learning environment in which students of all ages and backgrounds can learn together in a setting that encourages the free exchange of ideas and information. To accomplish this goal, the members of the RNU Board have established the following expectations for learning.

- All backgrounds and cultures are respected.
- During class discussions, everyone feels welcome to participate and a free exchange of ideas takes place.
- All members of the class arrive on time and leave the class only on breaks or in case of emergency.

- Distractions are kept to a minimum. Cell phones and other electronic devices are turned off in class, labs, and library. Students remain seated throughout class and refrain from talking with classmates while another class member or the instructor has the floor.
- Each student turns in work that is his or her own.
- Consideration is always given to other classes that are taking place in adjoining classrooms.
- At the end of a class, the members of the class and the instructor leave the classroom in good condition so that the next class can begin without disruption.

Reagan National University Library Services:

RNU's online collection contains over 60,000 volumes comprised of books, journals, videos, and faculty created resources. The Library Research Portal (library@rmu.edu) provides access to multiple services and authoritative resources for academic research including books, articles, texts, visual media, and teaching resources. Appropriate sources include scholarly and peer-reviewed journal articles, scholarly books, and well-respected news magazines and newspapers. The Library offers a large number of appropriate sources and each student is required to attend an online Library orientation. Assistance is available to help students select and locate appropriate sources when RNU is open. The online library is available to students 24 hours 7 days a week. All students can connect to the online library through the computers and laptops available at home and on campus. Each student must use their own pass code to access the library.

As an RNU student, you are required to use the RNU online library, as one source, to assist you in completing a required research paper or project.



Reagan National University

Syllabus

1. Administrative Information:

Course Number: MAT 231

Course Title: Calculus

Credit Hours: 3

Prerequisite: MAT 103

Term: SP 2019

Class Time: Friday 13:30-17:30

Class Room: 1

Instructor: [REDACTED]

Office Hours: M – TH 1:00 – 3:00 P. M.

Telephone: [REDACTED]

E-Mail: [REDACTED]

2. **Catalog Description:**

This course is an introduction to calculus which examines polynomial, rational, exponential and trigonometric functions and their transformations. Those in integration include the area under a curve, definite and indefinite integrals, numerical integration, substitution and applications of integration. Topics include: limits, the rate of change of a function, derivatives of algebraic and trigonometric functions, applications of derivatives and integration.

3. **Teaching Procedures:**

Teaching procedures for this course will include professional lectures, class discussions, reading assignments and examinations.

Participation in Class Discussion

Class participation is a very important part of the learning process in this course. Although not explicitly graded, you will be evaluated on the QUALITY of your contributions and insights. Quality comments possess one or more of the following properties:

- Offers a different and unique, but relevant, perspective;
- Contributes to moving the discussion and analysis forward;
- Builds on other comments;
- Transcends the “I feel” syndrome. That is, it includes some evidence, argumentation, or recognition of inherent tradeoffs. In other words, the comment demonstrates some reflective thinking.

We will use our assessment of your participation to manage borderline grades. While your participation grade is subjective, it will not be random or arbitrary. And, clearly, more frequent quality comments are better than less frequent quality comments.

4. **Text:** Calculus: Introduction to Theory & Applications by R.M. Johnson. Published by Paul & Co Pub Consortium (ISBN: 1898563063)

5. **Course Requirements:**

Due to the abundant amount of material that has to be covered in this class, in addition to the regular class periods, extra class might be necessary.

Examinations

There are two in-class exams and they are scheduled as:

Midterm: 6th class period

Final: last class

6. Course Requirements:

Letter grades will be assigned to each student based on a mathematical calculation of the points earned on the examinations. The weights of the exams are:

Midterm	40%
Final	40%
Homework	20%

The course grades are assigned as:

90 – 100%	=	A -
80 – 89%	=	B
70 – 79%	=	C
60 – 69%	=	D
Below 60%	=	F

Note: Scores and grades will not be “curved.” Therefore, any number of students in this course can earn a score of 100 (or 0) on quizzes or exams; and any number of students can earn a grade of A (or F.) By using the preceding factor, a student should constantly be aware of his/her potential final grade in the course. Students are welcome to discuss with the professor regarding to his/her progress or any aspects of the course.

7. Term Paper:

Term paper requires students to write a report on “What is Calculus?” In any scientific undertaking only precision and accuracy are satisfactory, when faced with unique ordeals, it is only through dedication and extensive work can we achieve such perfection. The underlying premise behind Einstein’s words, when he accredited not his great intellect but extensive focus and taught to achieving many of his accomplishments. I too fully embrace the merit of such principles and had experienced a period with which the practice of such ideals was pivotal to my success while in secondary school. In 2009 I had enrolled into Sixth form, because of the nature of the Caribbean’s educational system and the advantages it would deliver. There I had the opportunity to take on a rigorous advance curriculum that contained many perquisites helpful towards pursuing a chemical engineering degree. Since more students had now embarked on the Caribbean Advance Proficiency Examinations (CAPE) instead of the General Certificate of Education (GCE) and Edexcel programs, this posed a unique challenge for many teachers, more so mathematics teachers, who were versa. The paper is expected to be between 8 and 10 pages in length, including front and back matter. Sections of the paper will be developed throughout the course.

8. Classroom Policies:

Policies regarding to the University academic policies. You can get them from the Student Handbook on the University web-site or in the University catalog.

9. Attendance, Absence, Lateness, Incomplete:

In accordance with the policies of the Si Tanka University, class attendance is required, and classes will start promptly at the schedule time. If you are absent or excessively late, you will receive a score of zero for the participation of that class.

A course grade of “incomplete” will be given under very unusual circumstances, and only if the student has complete at least 75% of the assigned work by the last day of class and only when an incomplete contract is signed and approved.

10. Course Learning Outcome:

- Students will be prepared to learn the concepts of the design of a computing system and the relationship of the computer hardware and software.
- Students will be able to apply the theory of software engineering in the application software design concepts.
- Students will be able to identify and discuss the topics of operating systems development and hardware design principles.

11. Internet Use Requirement:

I have included optional homework and project assignments that will require students to use the Internet in order to satisfactorily complete them. Additionally, my web site will maintain copies of supplemental labs and handouts that the student will find beneficial. The University maintains open labs that provide Internet access to all students.

12. Academic Honesty:

It is assumed that all students have familiarized themselves with the university's policy on and definition of academic dishonesty. All work should be the student's own - academic honesty is expected of everyone. Those who do not adhere to university and professional expectations with respect to this will be dealt with in accordance with college policy. In general – students will receive a 0 on their work if they either submit work that isn't their own (including cutting and pasting content from the Internet without proper citation) or allow other students to use their work. A second instance results in failure of the course.

Class Schedule:

Class 1	2.1 The Idea of Limits
	2.2 Definitions of Limits
	2.3 Techniques for Computing Limits
Class 2	2.4 Infinite Limits
	2.5 Limits at Infinity
	2.6 Continuity
Class 3	2.7 Precise Definitions of Limits
	3.1 Introducing the Derivative
	3.2 Rules of Differentiation

Class 4	3.3 The Product and Quotient Rule
	3.4 Derivatives of Trigonometric Functions
	3.5 Derivatives as Rates of Change
Class 5	3.6 The Chain Rule
	3.7 Implicit Differentiation
	3.8 Derivatives of Logarithmic and Exponential
Class 6	Midterm Exam
Class 7	3.10 Related Rates
	4.1 Maxima and Minima
	4.2 What Derivatives Tell Us
Class 8	4.3 Graphing Functions
	4.4 Optimization of Functions
	4.5 Linear Approximation and Differentials
Class 9	4.6 Mean Value Theorem
	4.7 L'Hopital's Rule
	4.8 Antiderivatives
	5.1 Approximating Areas Under Curves
Class 10	5.2 Definite Integrals
	5.3 Fundamental Theorem of Calculus
Class 11	5.4 Working with Integrals
	5.5 Substitution Rule
Class 12	FINAL EXAM

13. Special Needs and Accommodations:

Please address any special problems or needs at the beginning of the quadmester with the instructor. If you are seeking accommodations based on a disability, you should provide a disability data sheet, which can be obtained from the student services office.

14. The Learning Environment:

Reagan National University is committed to providing a positive learning environment in which students of all ages and backgrounds can learn together in a setting that encourages the free exchange of ideas and information. To accomplish this goal, the members of the RNU Board of Directors have established the following expectations for learning.

- All backgrounds and cultures are respected.
- During class discussions, everyone feels welcome to participate and a free exchange of ideas takes place.
- All members of the class arrive on time and leave the class only on breaks or in case of emergency.
- Distractions are kept to a minimum. Cell phones and other electronic devices are turned off in class, labs, and library. Students remain seated throughout class and refrain from talking with classmates while another class member or the instructor has the floor.

- Each student turns in work that is his or her own.
- Consideration is always given to other classes that are taking place in adjoining classrooms.
- At the end of a class, the members of the class and the instructor leave the classroom in good condition so that the next class can begin without disruption.

Reagan National University Library Services:

RNU's online collection contains over 60,000 volumes comprised of books, journals, videos, and faculty created resources. The Library Research Portal (library@rnu.edu) provides access to multiple services and authoritative resources for academic research including books, articles, texts, visual media, and teaching resources. Appropriate sources include scholarly and peer-reviewed journal articles, scholarly books, and well-respected news magazines and newspapers. The Library offers a large number of appropriate sources and each student is required to attend an online Library orientation. Assistance is available to help students select and locate appropriate sources when RNU is open. The online library is available to students 24 hours 7 days a week. All students can connect to the online library through the computers and laptops available at home and on campus. Each student must use their own pass code to access the library.

As an RNU student, you are required to use the RNU online library, as one source, to assist you in completing a required research paper or project.



Reagan National University

Syllabus

1. Administrative Information:

Course Number: MGT 201

Course Title: Principles of Management

Credit Hours: 3

Prerequisite: No prerequisite.

Term: SP 2019

Class Time: Wednesday 9:00 – 12:45

Class Room: 4

Instructor: [REDACTED]

Office Hours: M, W 1:00 – 3:00 P. M.

Telephone: [REDACTED]

E-Mail: [REDACTED]

2. Catalog Description:

This course focuses on the theory and fundamental concepts of management including planning, organization, leadership, and control. It presents the management role and its practices and techniques. Various dimensions of management, organizational structure and functions of managers, growth and re-engineering of business will be covered.

3. Teaching Procedures:

Teaching procedures for this course will include professional lectures, class discussions, reading assignments and examinations.

Participation in Class Discussion

Class participation is a very important part of the learning process in this course. Although not explicitly graded, you will be evaluated on the QUALITY of your contributions and insights. Quality comments possess one or more of the following properties:

- Offers a different and unique, but relevant, perspective;
- Contributes to moving the discussion and analysis forward;
- Builds on other comments;
- Transcends the “I feel” syndrome. That is, it includes some evidence, argumentation, or recognition of inherent tradeoffs. In other words, the comment demonstrates some reflective thinking.

We will use our assessment of your participation to manage borderline grades. While your participation grade is subjective, it will not be random or arbitrary. And, clearly, more frequent quality comments are better than less frequent quality comments.

4. Text:

Management Fundamentals, 6e. by Robert N, Lussier. ISBN-13: 978-1483352268.

5. Course Requirements:

Due to the abundant amount of material that has to be covered in this class, in addition to the regular class periods, extra class might be necessary.

Examinations

There are two in-class exams and they are scheduled as:

Midterm: 6th class period

Final: last class